Ten Commandments of

1. *Seek to clarify your ideas before communicating.*

The more systematically we analyze the problem or idea to be communicated, the clearer it becomes. This is the first step toward effective communication. Many communications fail because of inadequate planning. Good planning must consider the goals and attitudes of those who will receive the communication and those who will be affected by it.

2. *Examine the true purpose of each communication.*

Before you communicate, ask yourself what you *really* want to accomplish with your message—obtain information, initiate action, change another person's attitude? Identify your most important goal and then adapt your language, tone, and total approach to serve that specific objective. Don't try to accomplish too much with each communication. The sharper the focus of your message the greater its chances of success.

3. *Consider the total physical and human setting whenever you communicate.*

Meaning and intent are conveyed by more than words alone. Many other factors influence the over-all impact of a communication, and the manager must be sensitive to the total setting in which he communicates. Consider, for example, your sense of *timing*—i.e., the circumstances under which you make an announcement or render a decision; the *physical setting*—whether you communicate in private, for example, or otherwise; the *social climate* that pervades work relationships within the company or a department and sets the tone of its communications; *custom and past practice*—the degree to which your communication conforms to, or departs from, the expectations of your audience. Be constantly aware of the total setting in which you communicate. Like all living things, communication must be capable of adapting to its environment.

4. *Consult with others, where appropriate, in planning communications.*

Frequently it is desirable or necessary to seek the participation of others in planning a communication or developing the facts on which to base it. Such consultation often helps to lend additional insight and objectivity to your message. Moreover, those who have helped you plan your communication will give it their active support.

5. *Be mindful, while you communicate, of the overtones as well as the basic content of your message.*

Your tone of voice, your expression, your apparent receptiveness to the responses of others—all have tremendous impact on those you wish to reach. Frequently overlooked, these subtleties of communication often affect a listener's reaction to a message even more than its basic content. Similarly, your choice of language—particularly your awareness of the fine shades of meaning and emotion in the words you use—predetermines in large part the reactions of your listeners.

Good Communication

6. *Take the opportunity, when it arises, to convey something of help or value to the receiver.*

Consideration of the other person's interests and needs—the habit of trying to look at things from his point of view—will frequently point up opportunities to convey something of immediate benefit or long-range value to him. People on the job are most responsive to the manager whose messages take their own interests into account.

7. *Follow up your communication.*

Our best efforts at communication may be wasted, and we may never know whether we have succeeded in expressing our true meaning and intent, if we do not follow up to see how well we have put our message across. This you can do by asking questions, by encouraging the receiver to express his reactions, by follow-up contacts, by subsequent review of performance. Make certain that every important communication has a "feedback" so that complete understanding and appropriate action result.

8. *Communicate for tomorrow as well as today.*

While communications may be aimed primarily at meeting the demands of an immediate situation, they must be planned with the past in mind if they are to maintain consistency in the receiver's view; but, most important of all, they must be consistent with long-range interests and goals. For example, it is not easy to communicate frankly on such matters as poor performance or the shortcomings of a loyal subordinate—but postponing disagreeable communications makes them more difficult in the long run and is actually unfair to your subordinates and your company.

9. *Be sure your actions support your communications.*

In the final analysis, the most persuasive kind of communication is not what you *say* but what you *do*. When a man's actions or attitudes contradict his words, we tend to discount what he has said. For every manager this means that good supervisory practices —such as clear assignment of responsibility and authority, fair rewards for effort, and sound policy enforcement—serve to communicate more than all the gifts of oratory.

10. *Last, but by no means least: Seek not only to be understood but to understand—be a good listener.*

When we start talking we often cease to listen—in that larger sense of being attuned to the other person's unspoken reactions and attitudes. Even more serious is the fact that we are all guilty, at times, of inattentiveness when others are attempting to communicate to us. Listening is one of the most important, most difficult—and most neglected—skills in communication. It demands that we concentrate not only on the explicit meanings another person is expressing, but on the implicit meanings, unspoken words, and undertones that may be far more significant. Thus we must learn to listen with the inner ear if we are to know the inner man.

PAUL DOUGLASS

District of Columbia Bar · Sometime President, The American University and Association of Urban Universities

Communication through Reports

1957

PRENTICE-HALL, INC.

Englewood Cliffs, N.J.

Library of Congress
Catalog Card No.: 57-5836

PRINTED IN THE UNITED STATES OF AMERICA

15290

PREFACE

IN THE FIELD OF REPORT WRITING, AUTHORITIES GENERALLY RECOGNIZE three methods of acquiring proficiency. The first involves progressive development from short to longer forms of composition. The second calls for a series of long reports. The third assists the learner in keeping a cumulative notebook of his work, which becomes his own handbook on report writing. This book emphasizes the third pattern as more active and creative, but *Communication through Reports* may be used in connection with either of the other methods.

For convenience, the materials are grouped into three main divisions: (1) principles and techniques employed in the development of a report, (2) language fundamentals, and (3) types of reports widely used by management. These three units of the book are tied together by problems involving all of them.

Each division of the book builds upon previous chapters, as the reader compiles his own handbook. He tests his progress when he meets challenging situations created for him in a progressive sequence at the end of each chapter. These problems have been devised with a special pattern in mind. One exercise supplies a short topic for quick completion; another provides practice in some important phase of writing a report; a third carries forward two projects which culminate in a long-form career

report and a research report in an area of special interest to the reader. Appropriately placed lists of readings offer sources for a broader view and fuller understanding of the several topics.

Educators, businessmen, industrialists, and leaders in all professions constantly see the need for better grammar and rhetoric in communication. A means for intensive review and a source for quick reference are as necessary as a dictionary and should be as available as a telephone. Part Two provides such a handy working tool. In functional terms, it summarizes the fundamentals of the language of reports. It warns against pitfalls. It furnishes a compact handbook for use in the settlement of the most frequent, troublesome problems.

"To learn by doing" is a reliable maxim. This dynamic approach to systematic report writing instructs the reader in basic fundamentals, guides him in preparing his personal encyclopedia of method and forceful style, and motivates him in actual practice to think straight and write well.

Competence in report writing develops skills in organizing and clarifying information. Good writing fosters logical thinking, nourishes the imagination, and establishes the habit of acquiring knowledge.

PAUL DOUGLASS

CONTENTS

Part One

Part Two

Part Three

Part One *is a unit which describes the principles, techniques, and operations used in the development of any report. The actual form which a report takes, as distinguished from the method by which it is developed, depends upon its purpose. Competence in writing reports of any kind, however, is achieved through the study of the fundamental functions explained in the following pages.*

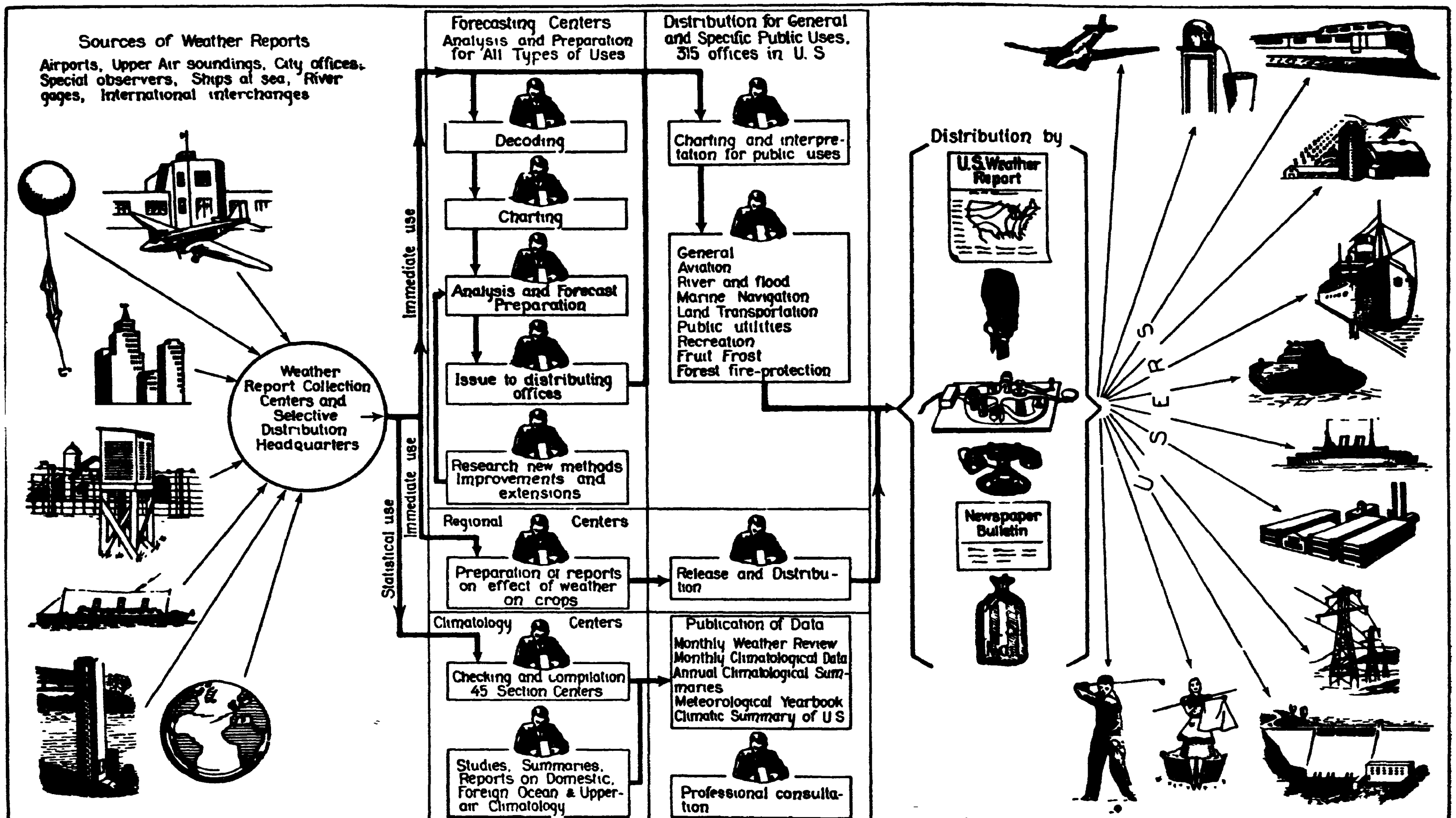
1

THE INFORMATION-DECISION PROCESS

IN MODERN MANAGEMENT SOUND THINKING DEPENDS UPON THE FLOW OF reliable reports. The report gives to an active mind the information necessary to make wise decisions. By logical arrangement and concise statement, with clarity and visual simplicity, it digests and brings to usable focus the results of a thorough inquiry into a problem. The report communicates information on the basis of which an executive can understand a situation, make a decision, initiate action, and control outcomes. Thus it serves as a link in the unending *information-decision process* of human activity. A good report puts the product of hard thinking into plain words for quick reading to guide prudent action.

THE ORDERLY HABIT OF MIND

The ability to write reports constitutes a fundamental skill required of every responsible officer within an organization. It is as necessary to the



Courtesy United States Weather bureau

Fig. 1.1. How the Weather Bureau writes reports

equipment of the administrator as mathematical skill has always been to the work of the engineer. Management quickly recognizes competence in the preparation of reports; the man who writes them well assumes a position of leadership at every point where accurate information supplies the basis for hardheaded discussion.

The task of writing reports is a stern but rewarding activity. Through experience in gathering facts and the mental discipline involved in their orderly presentation and meaningful interpretation, a writer masters a method of attacking problems. Competence in report writing means that a man has acquired (1) the technique of careful inquiry, (2) the habit of orderly thinking from problems to solutions, and (3) the capacity to make exact statement in attractive narrative. The writing of reports thus stands as a mental and linguistic performance of a high order. The study of report writing becomes a basic mental discipline much like that of a course on evidence in law schools.

WEATHER BUREAU REPORTS AS EXAMPLE

The work of the Weather Bureau provides a good introduction to the operations which go into the writing of reports. Indeed the weather news in the top corner of the daily newspaper supplies a superlative example of report writing. The Bureau reduces the specialized work of its intricate research organization to a brief statement to help a farmer decide whether to cut his hay:

WEATHER

Cloudy, high around 78° this afternoon. Thursday, rain.

On other pages the newspaper presents detailed explanations of this summary in statistical tables, geographical weather maps, and narrative discussion. Figure 1.1 outlines the process by which the Weather Bureau uses every medium of communication to distribute its reports throughout the nation.

SALESMANSHIP IN REPORT PRESENTATION

A report writer must not take it for granted that his document will be read. Ralph S. Richardson, head of the technical data department of General Motors Research Laboratories, insists that there must always be a large element of "sales effort and showmanship" in any technical writing. Being a realist, Richardson suffers from no illusions: he knows that a report must compete for an executive's time and interest with other reports, magazines, newspapers, and even golf and bridge games. From his extensive experience Richardson says that success in engineering and research depends as much upon the ability to present an idea convincingly as it does upon the ability to perform calculations and experiments. "The

most miraculous discovery in the laboratory," he insists, "is not a contribution to our knowledge until the results are recorded and transmitted to others."

The General Electric Company recognizes the importance of "selling" research to such an extent that the budget of its research laboratories flows from the appropriations of line departments. Because the research allocations stand as large sums in departmental budgets, line executives want to know what benefits they get for their money. This concern leads them to inquire what the laboratory can do to produce the largest return for the research dollar appropriated. Thus the laboratory constantly faces the necessity of "selling" its work to the line departments. In this process, General Electric puts emphasis on reports. It appoints liaison representatives from the research laboratories to work with departments and interdivisional groups. These liaison officers are in fact oral missionaries, "walkie-talkies" used to catalyze communication. The easy-to-read report becomes a basic document in the interaction of line and staff.

QUALITIES OF A GOOD REPORT

A good report communicates clear ideas in simple English to busy, average Americans. It commands attention from the moment a person looks at it. It stands out conspicuously among other papers and documents on a desk. It says to the possible reader: "Pick me up! I have something urgent to tell you." It is easy-to-read because it talks plainly in straight speech, because it uses visual aids where they will best carry forward the act of com-

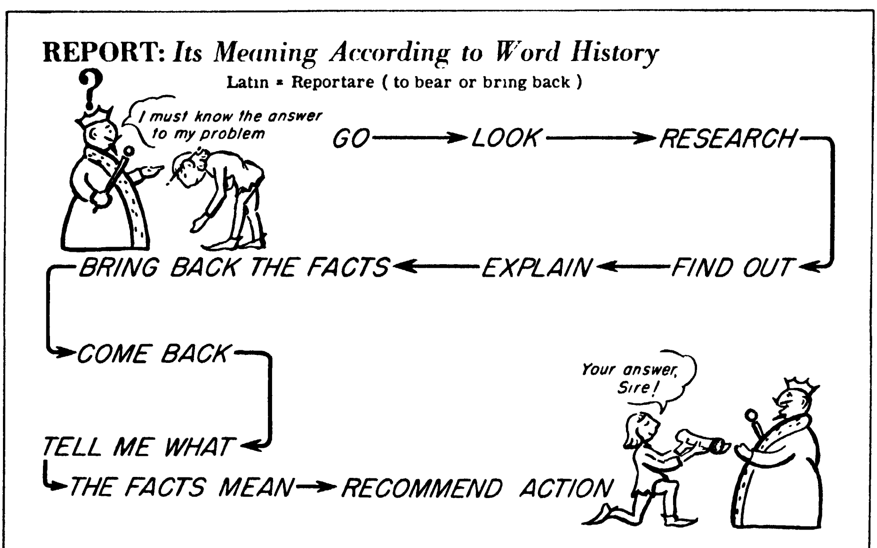


Fig. 1.2. The report: how its meaning developed

munication, and because the organization of the material is orderly and fast-moving. It sustains interest by the power of its presentation and the quality of its content. It brings satisfaction when the reader says gratefully, "Thank you, sir, I understand. Now I have the facts to guide me and a recommendation to act upon."

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TRY YOUR HAND AT THESE •

- **to test your report-writing ability**
- **to encourage observation and analysis**
- **to indicate your initial capability in the organization and presentation of material**
- **to provide material of permanent value for your notebook**

1. Daily papers report weather news in various patterns of presentation. Study any issue of a metropolitan newspaper and write a brief report on the subject: "How the X Newspaper Reports Weather News." In your study begin with the brief weather report always given on the front page. Follow page citations to the detailed discussion. In your report, show how the newspaper uses boxes, charts, tables, maps, and contrasting type faces. Illustrate your report with clippings to support your observations. Indicate how specific items of weather information may be of interest to special reading publics in your geographic area. In making your report use any form of presentation discussed in chapters 16, 17, or 18.

2. *The United States News and World Report* has developed editorial techniques to increase the effectiveness of communication and to ease the reader's visual task. Study chapter 4. Then write a report on "How the *United States News and World Report* Makes News Easy to Understand." Support each of your points with illustrations clipped from issues of the magazine.

3. Read the section in chapter 26 on "Think Memorandums." Then write a "think memorandum" in which you suggest that you would like to write a comprehensive report on your own career interest.

4. Lyman Bryson analyzes the communication act by asking five questions: (1) Who (2) says what (3) in which channel (4) to whom (5) with what effect. The United States Tariff Commission, an independent executive agency, issues a report for the advice of the President and Congress on

pottery tableware. Eastern Ohio, northern West Virginia, and western Pennsylvania produce three-quarters of the domestic supply. Nearly 18,000 American employees compete in the domestic markets with the product of workers in Czechoslovakia, France, Germany, Italy, the United Kingdom, China, and Japan. The pure white clay known as *kaolin,* used to form the paste of porcelain, comes from North Carolina, Florida, and Georgia. Kentucky, Tennessee, and England produce ball clay. Feldspar comes from North Carolina, South Dakota, and New Hampshire. Seven out of every ten producers belong to the Vitrified China Association and the United States Potters Association. Four out of every five workers belong to the National Brotherhood of Operative Potters affiliated with the American Federation of Labor-CIO. The industry is served by trade journals including *Ceramic Industry, Abstracts of the American Ceramic Industry, Retailing Home Furnishings, Crockery and Glass Journal, The Ceramic Age,* and the *Pottery Gazette and Glass Trade Review.* Use Bryson's analysis of the communication act and write an information report on the reading audiences of the Tariff Commission report. Then prepare a short memorandum in which you recommend writing the report at X level of reading difficulty.

2

METHOD

REPORT METHOD IS A WAY OF THINKING. THE MIND MOVES IN ORDERLY sequence from problems toward solutions. The writer holds himself to his subject as a ship keeps to its course. Ideas develop on a firm foundation so that each one leads to conclusions which contain the intellectual force of the preceding ideas. The mark of a competent reporter lies in his ability to sense meaningful relationships and to explain them convincingly with supporting evidence.

FOUR FUNDAMENTAL QUESTIONS

In planning his attack upon his problem a reporter asks four fundamental questions in these words: (1) Who wants to know? (2) What? (3) Why? (4) When? The answer to the "who" determines the reading audience. The answer to the "what" defines the subject. The answer to the "why" explains

the reason for the study. The answer to the "when" sets the time schedule according to which the work must be performed.

THREE PHASES OF THE TASK

As a method, report writing organizes its operational tactics into three phases:

1. precise statement of the question to which an answer is desired
2. building and execution of a plan to gather the necessary evidence
3. drafting of the document, tailor-made, to fit the needs of a particular reading audience.

Phase 1: STATEMENT OF THE QUESTION

The writer's first step in the development of his report begins when he proceeds to make the assignment clear. Assignments come to writers in all kinds of forms. Sometimes they originate in casual verbal requests. At other times the request may be transmitted as a carefully formulated project statement prepared by specialists in conference. In whatever form he receives the request, the writer must become absolutely clear in his own mind about what his task includes and what it excludes. He should not be timid about putting questions to his superiors who have assigned the task to him. He should never begin work with any blind spots in his mind about what is expected of him. Some industrial engineers verify their assignment by giving their clients a precise statement of the task they have undertaken. This kind of memorandum insures a complete meeting of minds from the very beginning. The reporter asks himself, "What exactly am I expected to do?" He proceeds to write out his idea of the assignment for his own guidance. This statement should be reviewed by the person or persons who gave him the problem to study. It should be initialed and dated by the principals to the operation.

Once the assignment has been made clear, the reporter brings his problem to focus. He states the subject in such a way that he can attack it objectively. A graduate student at Harvard University once asked President James B. Conant what he thought was the first requisite of a good chemist. Dr. Conant quickly replied, "The first requisite of a good chemist is to pick out the problem on which to work."

The writer says to his reader: "Now listen to me, Sir. So that we will understand each other completely, let me state exactly the problem which you and I are going to explore. Here it is . . ."

A market analyst gets right down to business in a study for a client when he begins:

The following report presents the results of a general market study on warm air furnaces to determine (a) the effectiveness of the company's marketing

efforts, (b) the acceptability of its products, and (c) the volume of potentiality, all for the purpose of formulating the company's future plans for organization, products, and facilities for the next year and succeeding years.

In the design of an experiment a research worker stated his problem like this:

> I propose to test the assertion of a lady that by tasting a cup of tea made with milk she can discriminate whether the milk or tea infusion was first added to the cup.

Phase 2: BUILDING AND EXECUTING THE PLAN

When he has brought the problem into focus, the reporter proceeds to build his plan of attack. This plan needs to be mapped out as carefully as a military mission. The writer asks himself three questions:

1. What tools do I need to record information?
2. To what sources shall I go for evidence?
3. How shall I time and schedule my operations to complete the report on the deadline date as set?

WORKING TOOLS

The primary working tool of the report writer is an adequate note system for recording the information which he collects. A good note system provides a flexible record in handy form for the effective use of facts and ideas. The system should be elastic, simple to manipulate, and easy to use. It should provide for the classification of units of information which are

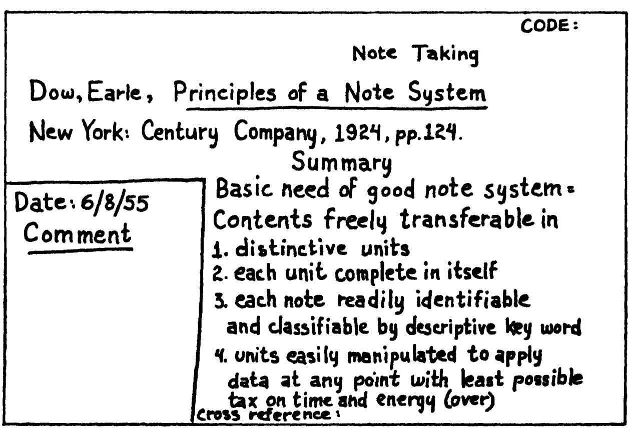

CODE:
Note Taking
Dow, Earle, Principles of a Note System
New York: Century Company, 1924, pp. 124.
Summary
Date: 6/8/55
Comment
Basic need of good note system:
Contents freely transferable in
1. distinctive units
2. each unit complete in itself
3. each note readily identifiable
and classifiable by descriptive key word
4. units easily manipulated to apply
data at any point with least possible
tax on time and energy (over)
Cross reference:

Fig. 2.1. Bibliographical note

complete in themselves. These units should be easily identifiable and capable of organization around key words. The system must provide for

cross-indexing as well as for classification. Further it must provide for a card record inventory and control of larger documents such as manuscripts, reports, charts, maps, and schedules.

To outfit himself for work, the writer should procure

1. A supply of 4″ x 6″ cards in three colors, white for bibliographical notes, buff for subject notes, and blue for notes recorded as a direct quotation. Cards of other sizes may be more convenient for some purposes.
2. A box file for the cards with alphabetical, numerical, or subject separators.
3. Manila folders 8½″ x 11″ for the larger materials needed for reference.
4. A looseleaf notebook in which materials may be arranged and rearranged as they are written.

Some writers find wire-bound notebooks valuable when the pages are pre-punched so that they can be torn out and transferred to the looseleaf notebook. In laboratory work the "lab" notebook supplies the original record of the experiment.

NOTE-TAKING

Notes fall into two general classes: (1) bibliographical records and (2) subject items. The bibliographical note should be prepared according to the standard cataloging practices in a library. In Figure 2.1 the bibliography note follows the general form of the library card.

Except for the entry of temporary key words for provisional classification, notes should be written in ink. They should be recorded with accuracy of source and substance, so that no further verification will be necessary. Carelessness in note-taking can result in subsequent inaccuracy and often in added labor necessitated by rechecking on the source.

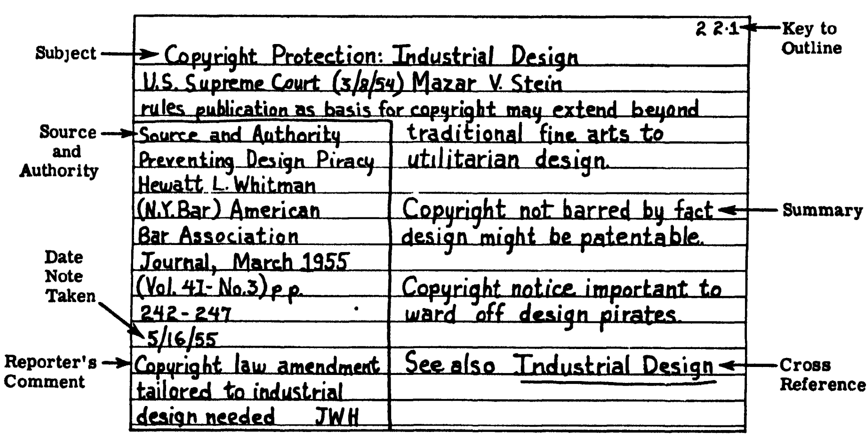
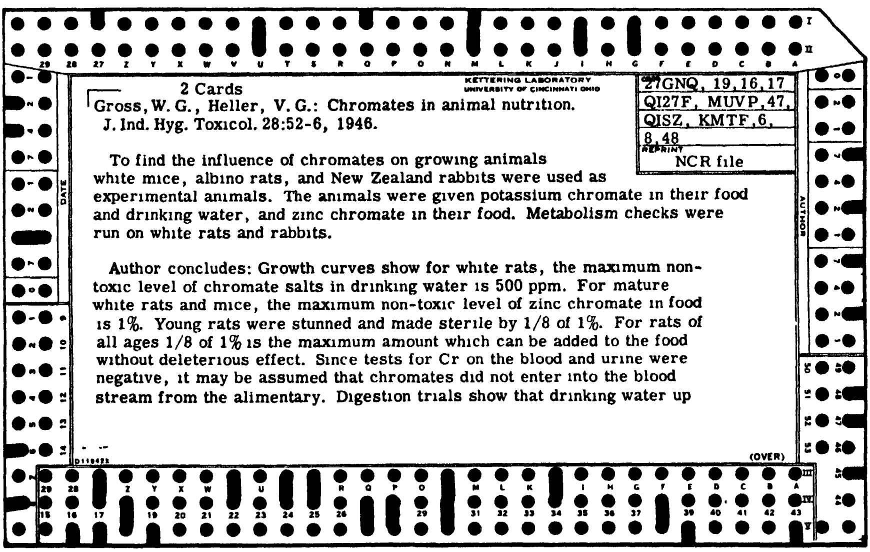


Fig. 2.2. Subject note

KEYSORT NOTES

The necessity for quick access to voluminous reliable notes has resulted in the development of cumulative note files based on the keysort card. The Kettering Laboratory, University of Cincinnati, for example, keeps exhaustive bibliographical and subject notes on coded keysort cards like the one shown in Figure 2.3.

For general note-taking purposes, a keysort card of the type indicated in Figure 2.4 has advantages of long-run usefulness. These cards cost about a cent apiece. A two-drawer file provides a highly practical work space. Since a reporter becomes an expert on the subject he studies, his command over his field becomes a permanent part of his professional activity. His note file therefore continues to be a part of his cumulative body of knowledge about the subject on which he is an authority of growing influence.



2 Cards

KETTERING LABORATORY
UNIVERSITY OF CINCINNATI OHIO

Gross, W. G., Heller, V. G.: Chromates in animal nutrition.
J. Ind. Hyg. Toxicol. 28:52-6, 1946.

27GNQ, 19,16,17
QI27F, MUVP,47,
QISZ, KMTF,6,
8,48
REPRINT
NCR file

To find the influence of chromates on growing animals white mice, albino rats, and New Zealand rabbits were used as experimental animals. The animals were given potassium chromate in their food and drinking water, and zinc chromate in their food. Metabolism checks were run on white rats and rabbits.

Author concludes: Growth curves show for white rats, the maximum non-toxic level of chromate salts in drinking water is 500 ppm. For mature white rats and mice, the maximum non-toxic level of zinc chromate in food is 1%. Young rats were stunned and made sterile by 1/8 of 1%. For rats of all ages 1/8 of 1% is the maximum amount which can be added to the food without deleterious effect. Since tests for Cr on the blood and urine were negative, it may be assumed that chromates did not enter into the blood stream from the alimentary. Digestion trials show that drinking water up

(OVER)

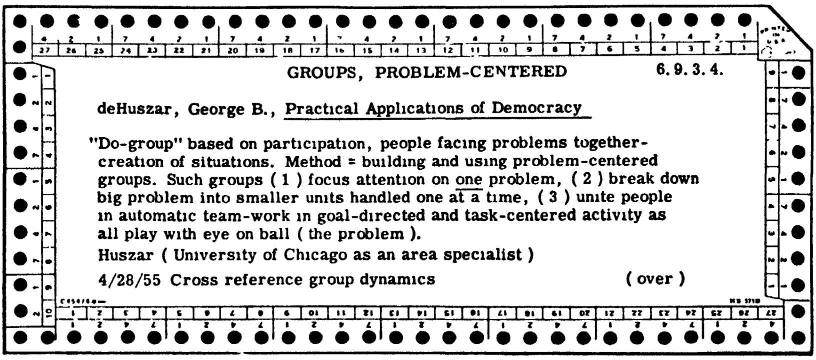
By permission, Edward T. Cleary, Ohio River Valley Sanitation Commission

Fig. 2.3. Keysort bibliographical note

The subject note should identify its content by means of a key word in the upper left corner. The card should indicate the source of the material and the authority. It should leave space at the left for the notation of the date on which the note was taken and for subsequent comment. It should provide for cross-indexing.

The keysort system provides marginally punched card records of notes for fast, accurate sorting into any desired classification. The holes around the sides of the keysort card are coded by notching away that portion of

the card between the hole and the edge. These notches allow the coded cards to be separated from the unnotched cards when a sorting needle is inserted in one of the holes of a group of cards. Since notched cards have nothing to support them on the needle, they fall from the group while the unnotched cards remain on the needle.



GROUPS, PROBLEM-CENTERED 6.9.3.4.

deHuszar, George B., Practical Applications of Democracy

"Do-group" based on participation, people facing problems together-creation of situations. Method = building and using problem-centered groups. Such groups (1) focus attention on one problem, (2) break down big problem into smaller units handled one at a time, (3) unite people in automatic team-work in goal-directed and task-centered activity as all play with eye on ball (the problem).

Huszar (University of Chicago as an area specialist)

4/28/55 Cross reference group dynamics (over)

Fig. 2.4. Keysort card for general note use

When the note system has been developed, the reporter turns to the building of his plan of action. An old proverb runs like this: "Plan your work. Then work your plan." The reporter gains power by organizing his effort. Before he begins his detailed work, he needs to think his project all the way through. A builder does not begin the construction of a skyscraper until he possesses the architect's blueprints. He wants to know what materials he needs, how and where they are going to be used, what the completed building is going to look like, and what purpose it will serve.

As the reporter faces the task of thinking his project through to determine the specific direction of his action, he asks himself questions. "What information do I need to work through the problem assigned to me?" "Where shall I look for such information?" He begins to sketch a preliminary road map of his itinerary to guide him in gathering evidence. Like the lawyer, a reporter must develop evidence which is logically relevant to his problem and competent to support the point. Evidence is relevant when it establishes relationships which have meaning within the frame of reference of the problem. It is competent when it is trustworthy and authoritative.

In determining the information which he needs to gather, the reporter is selective. He wants evidence to bear directly on the topic at issue. At this point a simple worksheet will help him.

My problem:

1 Questions I need to answer	2 Where I shall go to find the answer	3 Time when I shall do the work
1. 2. 3. 4. 5. etc.		

The list of questions jotted down in Section 1 supplies the preliminary working outline. The guide to sources of information in Section 2 provides an action map. The work schedule planned in Section 3 furnishes a time calendar which keeps the project moving.

THE COLLECTION OF INFORMATION

Report writing has no research techniques which are especially its own. It is eclectic. It uses whatever methods or tools at the moment will best contribute toward finding the answer to the stated question. By every means at his command the report writer searches for evidence. He finds this evidence in

1. statements and testimonies obtained from interviews, questionnaires, enumerations, and registrations
2. written documents
3. real evidence addressed directly to the senses without the intervention of a witness; that is, by direct inspection, observation, and experiment

TALKING WITH SPECIALISTS

The writer can well begin his collection of information by discussing his assignment with people who know most about the subject. A visit with them will open up their experience and give sharpness to his own approach. By pointed questioning and careful listening he will launch his project with competent orientation. He will come away from each interview with some valuable material which the person loans or gives him and with ideas which enrich his own reflection.

REVIEWING PREVIOUS STUDIES

Once the writer has obtained the guidance of persons who have given special thought to the general field in which his subject lies, he needs to find and examine reports which have been previously issued on his or re-

lated subjects. A writer should find everything which already has been done so that he will not duplicate effort. A good writer saves his own time and strengthens his operation by building on the foundations which others have already competently laid.

DIGGING IN THE LIBRARY

The exploratory phase of research heads up in the library. A good reporter is at home among books and documents. As he develops a feel for his subject, he accumulates notes which lead to further inquiry. The only way to learn how to use a library is to go to the indexes and go to work. There are no effective paper lessons which will give a report writer the experience and skill necessary to learn his way around the library.

The real use of a library begins when the writer enlists the librarian as his working partner in the project. More time is wasted by beginning writers at this point than at any other. Librarians are paid to help people who use the libraries; the writer should put the public, university, company, or agency librarian to work for him without the slightest feeling that his request is an imposition. To get the fullest cooperation from a librarian, the writer should inform her exactly what he is doing, what kinds of material he is looking for, what documents he wants, and why. When the librarian gets a clear picture of what his project is, she actually joins his "staff" as a colleague. Librarians want to be helpful in this way. The best advice which can be given to a writer is this: Go directly to the librarian, explain the project, and use her professional experience.

HISTORICAL BACKGROUNDS

To set his problem in perspective, the writer must project it against historical backgrounds. To do this he must search old files, abstract letters, analyze minutes of meetings, summarize documents, and cite laws and regulations. He works out the "history" or "background" of the problem. In reconstructing the past the writer needs to be on his guard to evaluate the relative worth of the various sources of evidence. In dealing with documents he asks himself two questions: (1) "Are the documents authentic?" (2) "Are the authentic parts credible?" In evaluating statements, he asks whether the primary witness or the ultimate source of the detail was *able* and was also *willing* to tell the truth, whether this primary witness was accurately reported with regard to the detail under examination, and whether there is any independent corroboration of the detail. If a detail passes these tests, it is credible historical evidence.

ASKING QUESTIONS

One direct way to gather information is to ask people questions. The newspaper reporter daily uses this technique quickly to reconstruct the

relationships involved in an event. By stating questions orally, first to one person, then to the other, by reference to documents, by inspection of real evidence, the reporter weighs, sifts, and evaluates his information until he believes he has established a reliable story. The five basic questions which the reporter poses are the familiar *Ws*: (1) Who? (2) What? (3) When? (4) Where? and (5) Why? Just as the news reporter under the discipline of deadline time and column-inch space writes *his* version of what happened, lawyers in court question witnesses for evidence to explore an event. From all the testimony produced, the jury decides what are facts and what are not facts. In the same way the report writer formulates searching questions and directs them to persons who ought to have special competence in answering them.

DESIGNING A SCHEDULE

Whether questions are asked in personal interview, whether they are directed to individuals who have special knowledge of the subject, or whether they are posed by a George Gallup or an Elmo Roper to a general sample of the population, the inquiring method of gathering facts requires what is technically known as a "schedule." *A schedule is a carefully prepared arrangement of inquiries to evoke information and evidence for answering the question at hand.*

In designing a questionnaire schedule, the report writer asks himself four questions:

1. *What* facts do I need to know to explain my problem at this point?
2. *Why* exactly do I need this particular fragment of information?
3. *Whom* shall I ask to give me the answers I want?
4. *Why* should I ask these persons?

The magazine *Woman's Day* asked Elmo Roper to study ladies who bought the magazine and to report to the publisher about the characteristics and attitudes of its readers. The Roper organization stationed interviewers in A & P stores to record the names and addresses of some 30,000 persons who bought copies of *Woman's Day*. From this list Roper selected a sample by taking names at random, exercising care to make the sample correspond with the true cross-section of *Woman's Day* buyers and to apportion the names geographically according to *Woman's Day* circulation. Interviewers then personally called upon and directly interviewed 2,006 women sampled from the list. The sample was further classified on the basis of economic level as (1) prosperous, (2) upper middle class, (3) lower middle class, and (4) poor. A small section of the questionnaire schedule developed and used by Elmo Roper in the *Woman's Day* study is presented in Figure 2.5. A schedule sheet serves as a guide in the exploration of a problem. The United States Department of Commerce, for example, pub-

8. (ASK FOR EACH MAGAZINE LISTED) About how long ago did you happen to read or look through an issue of ______ ?

	During Oct., Sept., or Aug 19__	During 19__ but before Aug. 1	Before Jan. 1 19__	Never (vol.)	Don't know
Good Housekeeping	18–1	2	3	4	5
Ladies' Home Journal	19–1	2	3	4	5
McCall's	20–1	2	3	4	5
Woman's Day	21–1	2	3	4	5
Woman's Home Companion	22–1	2	3	4	5

ASK ALL RESPONDENTS EXCEPT THOSE WHO ANSWERED "NEVER" TO ALL FIVE MAGAZINES IN "8"

9a. Which of these magazines do you think would probably give you the most practical help in running your home? (HAND RESPONDENT CARD)

b. (UNLESS "NONE OR DON'T KNOW" IN "a") Which of these magazines ______ do you think would be next best for giving you practical help in running your home?

	a. Most help	b. Next best
Good Housekeeping	23–1	24–1
Ladies' Home Journal	2	2
McCall's	3	3
Woman's Day	4	4
Woman's Home Companion	5	5
None or don't know	6	6

ASK EVERYONE

10a. Does anyone in your family other than yourself like to read Woman's Day?

Yes	25–1	(Ask B)
No	2	(Skip to 11)

b. (IF "YES") Are these other readers male or female or both?

Male only	25–3	(Skip to 11)
Female only	4	(Ask C)
Both	5	(Ask C)

Fig. 2.5. Roper Schedule: Woman's Day Study

lishes a check list, shown as Figure 2.6, to help the businessman study the potential market for a new industrial product.

HOW MANY USERS WILL THERE BE?*

Every manufacturer or distributor wishes that he could count his "sure" prospects as easily as he can count his output. But he never can. You never have 3,000 or 3,000,000 prospects. Instead you have 3,000 or 3,000,000 prospects—*if*—if the product is right, if it is packed and shipped right, if the discounts are right, if business conditions are right.

Since so many factors enter into estimating the number of users, there is a great temptation to lapse into wishful generalities—unsupported by field tests or by arithmetic—in counting your prospects. Avoid that at all costs.

These questions will help you to make an initial estimate and then to cut down that estimate realistically on the basis of stated limiting factors. The estimate must be cut still more in the light of later sections.

Check list on number of users

1. What industries will use the new product? (Are they farmers, manufacturers of mining machinery, long-haul truckers, or what? List those that first occur to you.)

1. ______________	5. ______________
2. ______________	6. ______________
3. ______________	7. ______________
4. ______________	8. ______________

* CHECK LIST TO HELP YOU INTRODUCE YOUR NEW INDUSTRIAL PRODUCTS (*Washington: Government Printing Office, 1946*), *pp 4-6.*

Fig. 2.6. Nonstatistical question schedule for use in forecasting users of a new product

2. Does your product have any possibilities for consumer use? (For example, if it is a new blowtorch, might it find use in home workshops as well as in industry? If so, what? ______ ______
3. Can you count on selling any of your product to the federal government, including the armed forces? ______ ______
4. Can you count on its being used by state and local governments? ______
5. How many potential customers (neglecting all competitors and other complicating factors) are there in this country? (In the columns below list *every* type of potential user—for example, meat packers or electric utilities—that you and your friends and associates can think of. Then on the basis of the U.S. Census of Manufacturers, manufacturers' registers, and other sources mentioned at the back of this booklet, put an estimated number of prospects, either firms or individuals, opposite each type of user. For example, if your product were an improved electric gluepot, you would list all major users such as furniture factories and minor users such as individual cabinetmakers. Total each column and add the two totals.)

PRIMARY USERS		MINOR USERS	
Type	Number	Type	Number

Total *primary* users ______ Total *minor* users ______

Total potential users in U. S. ______

6. What factors cut down the size of the total market?
   a. What percentage of the potential customers are located in sections of the country where there is little use for the product? (For example, southern municipalities need little snow-removal equipment. Industries in natural gas areas are not apt to buy automatic stokers.) ______ ______
   b. What percentage will be poor prospects because they use smaller-scale or larger-scale equipment than your product? (For example, bus companies in small towns may not be able to use automatic vehicle-washing equipment efficiently.) ______ ______
   c. What percentage are likely to be out of the market because they already have similar products giving satisfactory service? ______
   d. What other market-limiting factors, if any, are peculiar to the nature of your product, and roughly by what further percentages might they reduce the size of your total market? ______ ______

   ______ ______

   ______ ______

Total ______ ______

Fig. 2.6. (*cont.*)

7. How many prospects are left for your type of product? (Reduce No. 5 by the percentage total in No. 6) ____ ____
8. What additional percentage deductions in the estimated size of your total market must be made? ____ ____
   a. Deduction for the internal industry situation (patents and the like) ____ ____
   b. Deduction for competitors' inroads on your market ____ ____
   c. Deduction for price range ____ ____
   Total ____ ____
9. How many prospects are available after these additional deductions? (No. 7 less the percentage total in No. 8) Estimated total available prospects ____ ____
10. How many of your products would each typical prospect normally use per year? (If your product would last the typical prospect 5 years, then write 1/5) ____ ____
11. How many prospects can you then estimate for your product for the first year? (Multiply the number available prospects by the average number of your product each one would use per year; that is, multiply No. 9 by No. 10) Estimated total available prospects for first year ____ ____
12. Is the market for your type of product likely to change in size during the next 2, 5, or 10 years? ____ ____
13. Are there foreign sales possibilities for your product? (If so, you may later want to estimate the number of prospects in various foreign countries. The Department of Commerce can give you much useful information on these foreign prospects. In most cases, however, you will want to establish a domestic market before branching out abroad.) ____ ____

Fig. 2.6. (*cont.*)

OBSERVATION, MEASUREMENT, INSPECTION, AND EXPERIMENTATION

In general, reporters must gather a good deal of information by inspection, observation, measurement, and experimentation. Take the case of a traffic engineer who, by means of a pneumatic hose laid across the highway, makes an automatic measurement of the flow of vehicles down an avenue. His counter clock registers and adds the number of vehicles. The total, measured by timed intervals, gives a quantification of information which can be tabulated, charted, and used to analyze a highway problem. An architectural engineer inspects the conditions of a building. On the basis of his inspection he writes:

> Report of exterior inspection discloses serious brick disintegration in the north and east walls. In many areas the mortar joints could be scraped out easily with a knife. The north wall has developed tension cracks along brick courses, immediately over lintel brick rows, extending upwards several feet.

This wall has a pronounced outward bulge, starting at the first floor line and becoming large enough to measure about two inches at midheight of structure.

The brick chimney at the rear of the building and on the east wall is tipped severely away from the vertical.

Wood lintels over basement windows in the north wall show evidence of dry rot, and in one case no bearing is provided at one end, the lintel hanging freely and apparently supported by the sash . . .

Conclusion: All evidence of distress in floors and partitions above the first floor can probably be attributed to the buckled wood column and displaced beams in the hallway. Brick-bearing walls, above the first floor, in general, are disintegrating, and cracks running diagonally above the window and door openings indicate an unequal foundation settlement and inability of brick lintels to support any loads. Poor bearing conditions of floor joists in brick walls are probably a result of the joists due to the large midpoint deflections.

The entire structure above the first floor can be termed as unsafe for occupancy.

A surveyor records on his working sheets the measurements which his instruments read. Weather Bureau meteorologists enter their observations

W B FORM 1130 A

Washington, D. C.
Washington National Airport)

U S DEPARTMENT OF COMMERCE, WEATHER BUREAU
SURFACE WEATHER OBSERVATIONS

STATION __________ DATE June 5

TIME (LST) 16	STATION PRESSURE (ins) 17	DRY BULB (°F) 18	WET BULB (°F) 19	REL HUMIDITY (%) 20	TOTAL SKY COVER 21	CLOUDS AND OBSCURING PHENOMENA — LOWEST LAYER AMT 22	TYPE & DIR 23	HEIGHT 24	SECOND LAYER AMT 25	TYPE & DIR 26	HEIGHT 27	SUMMATION TOTAL 28	THIRD LAYER AMT 29	TYPE & DIR 30	HEIGHT 31	SUMMATION TOTAL 32	FOURTH LAYER AMT 33	TYPE & DIR 34	HEIGHT 35	PRESSURE TENDENCY 36	NET 3 HR CHANGE 37	Total opaque sky cover 38	PRECIP INCHES 39	SUNSHINE MIN 40
00 00	29900	690	680	95	10	10	AC	100	U				U				U					10		
01 26	29900	691	67.6	92	10	10	AC	E100	U				U				U			6	.010	10		
02 26	29900	692	67.2	90	10	10	SC	M26	U				U				U							
03																								
04																								

TYPE 1	TIME (LST) 2	SKY and CEILING (Hundreds of Feet) 3	VISIBILITY (Miles) 4	WEATHER and OBSTRUCTIONS TO VISION 5	SEA LEVEL PRESS (mbs) 6	TEMP (°F) 7	DEW PT (°F) 8	WIND DIRECTION 9	SPEED (mph) 10	CHARACTER AND SHIFTS 11	ALTIMETER SET (ins) 12	REMARKS AND SUPPLEMENTAL CODED DATA 13	13A	13B	OBSERVERS INITIALS 19
R	0025	E100 ⊕	5	HK	149	69	68	→↗	4		996	88483			EI
✓	0053	E100 ⊕	5	F				→↘	4		996				EI
R	0126	E100 ⊕	5	F	149	69	67	↑↗	5		996	88483			EI
✓	0153	M35 ⊕	5	F				↑↗	4		996				EI

SYNOPTIC OBSERVATIONS

TIME (GCT) 41	TIME (LST) 42	NO 43	PRECIP (ins) 44	SNOW FALL (ins) 45	SNOW DEPTH (ins) 46	MAX TEMP (°F) 47	MIN TEMP (°F) 48	HGT 850 MB SURFACE 49	STATE OF GRND 50	SEA STATE & DIR 51	SWELL HGT & DIR 52	SWELL PERIOD 53	SUM H_s H_s M_s P_s D_s 54	WATER TEMP 55	SOIL TEMP 56	57	58
	MID TI																
		1															
		2															
		3															
		4															
	MID																

STATION PRESSURE COMPUTATIONS				
TIME (LST) 59				
ATT THERM 60				
OBSRVD BAR 61				
TOTAL CORR 62				
STA PRESS 63				
BAROGRAPH 64				
BAR CORR 65				

SUMMARY OF DAY (MIDNIGHT TO MIDNIGHT)

24-HR MAX TEMP (°F) 66	24-HR MIN TEMP (°F) 67	24-HR PRECIP (WATER EQUIV) (ins) 68	24-HR SNOWFALL UNMLTD (ins) 69	SNOW DEPTH (ins) 70	PEAK GUST SPEED (mph) 71	DIRECTION 72	TIME (LST) 73	THICKNESS OF ICE ON WATER (ins) 74	FROZEN GRND LAYER (ins) TOP 75	BASE 76	RIVER GAGE 77	Max-Rel Hum 78	Min Rel Hum 79	80	81

PRECIP & THDRSTM 82	BEGAN 83	ENDED 84	DUR 85 hrs	mins	OBSTR TO VIS 86	BEGAN 87	ENDED 88	DUR 89 hrs	mins

REMARKS NOTES AND MISCELLANEOUS PHENOMENA 90

SUNRISE __________ SUNSET __________

Max Avg 5 Min Speed & Dir. | Time LST & Dir | Fastest Mile | Time LST

Fig. 2.7. Schedule sheet used by Weather Bureau to record observations

on the schedule sheet shown in Figure 2.7. This standard schedule is worked out in advance of the observations. It guides the observer in the selection and classification of data.

Phase 3: DRAFTING THE DOCUMENT

CLEARNESS, UNITY, COHERENCE, AND DIPLOMACY

From the moment that he begins to study his problem, the report writer is thinking about the form and quality of his final document. He knows that an effective report possesses four basic qualities. Upon the foundations of sound reasoning and trustworthy data, a good report makes *clear statement* as the product of an orderly and confident mind. By sharp focus upon the precisely-stated problem, it achieves a *unity* which produces a singleness of impression. By a development which makes each part grow naturally out of the section which precedes it, it achieves *coherence.* By *tactful statement* it presents constructive proposals so that they will be acceptable to the reader without in any way antagonizing him.

So important does General Motors consider these qualities that it keeps them before its engineers in these words: clearness, unity, coherence, and diplomacy.

A GOOD OUTLINE

- makes clear the plan on which the report is built
- gives the reader an overview of the contents
- identifies important ideas
- shows how ideas are related to one another
- subordinates detail to proper perspective
- communicates ideas with logical and convincing economy
- provides for clearness, unity, coherence, and diplomacy in presentation
- insures that the same message will be conveyed to all readers
- is consistent in form, giving attention to uniformity in style, indentation, parallelism, and subordination

---

Fig. 2.8. Qualities of a good outline

The writer incorporates these four qualities into his report as a result of careful planning by means of a working outline.

THE WORKING OUTLINE

An outline is the backbone of a report. As soon as the writer can glimpse his report as a whole, he arranges his thoughts in an orderly sequence on paper. He may—and most generally will—revise his provisional outline a number of times as his ideas clarify with research and reflection.

As a help to orderly thinking and as a necessary guide to the proper classification and organization of notes, a writer adopts some one pattern

for use in the construction of his outline. The pattern shown in Figure 2.9 uses Roman numerals for the major heading. Capital letters identify the

---

Title centered ⟶ *SUBJECT TITLE*

Capital Roman numerals for major headings ⟶ I. . .

Capital alphabetical letters for subdivisions ⟶ A. . . . .
B. . . . .
C. . . . .

Arabic numerals for next subdivisions ⟶ 1. . . . .
2. . . .
3. . . .

Lower case alphabetical letters for next division ⟶ a. . . . . . .
b. . . . . . .
c. . .

Small Roman numerals for further division ⟶ i. .
ii.

Roman numerals always aligned at right, left margin being variable ⟶ iii.

Fig. 2.9. Number-letter outline code

---

*OUTLINE FORM**

1. FIRST MAIN IDEA BEING OUTLINED.
   a. Fact, opinion, or evidence supporting this idea.
      (1) Important item relating to *a*.
      (2) Another item relating to *a*.
         (*a*) Subordinate data in support of (2).
         (*b*) More data in support of (2).
            1. Item to support (*b*).
               (a) Subtopic supporting *1.*
               (b) Another item supporting *1.*
            2. Another item in support of (*b*).
         (*c*) Another point supporting (2).
   b. Another fact supporting 1.

2. SECOND MAIN IDEA BEING OUTLINED. Equal to 1, above.
   a. Fact supporting second main idea.
      (1) Item explaining *a*.
      (2) Second item explaining *a*.
   b. Second fact supporting second main idea.

* TECHNIQUES OF MILITARY INSTRUCTION, *FM 21-6 (Washington: Government Printing Office, 1954), p. 34.*

Fig. 2.10. Army outline form

chief subdivision. Sections within subdivisions are marked by Arabic numerals. Further subdivision is indicated by the use of lower-case letters and by small Roman numerals.

The Army suggests a variation of this system in the pattern exhibited in Figure 2.10. Main points are indicated by Arabic numerals, subtopics by lower-case letters, and subordinate detail by numbers and letters in parentheses.

For purposes of correlating the note system to the outline, the pure number code outline pattern is especially useful. The pattern identifies each major section with an Arabic numeral beginning with 1. Subdivision classification can be made to any degree of refinement merely by repeating the chapter code number and adding to its sequence numeral. Figure 2.11 shows how the pure number code is worked out for an eight-chapter report.

ESSENTIALS OF MANAGEMENT FOR SUPERVISORS

1. The five phases of supervision
    1.1 Planning
    1.2 Organizing
    1.3 Commanding
    1.4 Controlling
    1.5 Coordinating
2. The planning function
    2.1 Planning as arrangement of means to accomplish objective
    2.2 Factors in successful planning
        2.2.1 A definite major objective
        2.2.2 Small well-defined minor objective
        2.2.3 Priorities for minor objectives
        2.2.4 The human factor: plan must be sold to people
    2.3 Evaluating plans
        2.3.1 Steps necessary to accomplish the major objective small enough to facilitate detailed planning
        2.3.2 Steps planned in detail
3. The organizing function
    3.1 Unity of command (One boss)
        3.1.1 "A man cannot serve two masters."
        3.1.2 Organization chart to show proper channels
        3.1.3 Communication through channels
        3.1.4 Classification of relationships by job definitions
    3.2 Span of control
        3.2.1 People. optimum number of subordinates
            3.2.1.1 Breaking up group to manageable units
            3.2.1.2 Delegation within group
                3.2.1.2.1 Decrease in span of control
                3.2.1.2.2 Development of assistants
        3.2.2 Distance
            3.2.2.1 Shortening span of control
            3.2.2.2 Centralized control with decentralized operation
        3.2.3 Time
            3.2.3.1 Task to be accomplished in time limit
            3.2.3.2 Short time jobs requiring fewer controls

Fig. 2.11. Pure number outline system

3.3 Homogeneous assignments
3.4 Delegation of responsibility with corresponding authority
3.5 Basic types of organization
3.5.1 Line organization
3.5.2 Staff type organization
3.5.3 Line-staff organization
3.5.4 Functional organization
3.5.5 Committee type organization

4. The command function
4.1 Means of putting plans into action
4.2 Making decisions
4.2 1 Defining the problem
4.2 2 Getting the facts
4.2.3 Analyzing the facts
4.2.4 Making the decision
4.2.5 Informing the person
4.3 Exercising leadership
4.4 Giving orders

5. The control function
5.1 Controlling action of men
5.2 Controlling materials
5.2 1 Setting standards of quality
5.2.2 Means of impersonally determining how far standards are met
5.3 Controlling processes
5.3.1 Policy manual
5.3.2 Operating manual
5.3.3 Standard practice procedure
5.3.4 Engineering specifications

6. The coordinating function: getting the right person, material, or equipment to the right place at the right time
6.1 Planning function as determined by
6.1.1 Major and minor objectives
6.1.2 Priority
6.1.3 Developing methodologies
6.1.4 Showing each member how his part fits into the whole
6.2 Organizing function as determined by
6.2.1 Correct structure
6.2.2 Position classification to carry out each function
6.2.3 Job description
6.2.4 Delegation with authority
6.3 Command function
6.4 Control function

7. Types of coordination
7.1 Vertical, keeping channels of authority open from top management to worker
7.2 Horizontal, developing team play
7.3 Mechanical getting

8. Methods of achieving vertical and horizontal coordination
8.1 Conferences
8.2 Advisory Committees
8.3 Administrative orders
8.4 Interoffice and shop memorandums
8.4.1 Routing slip
8.4.2 Return to sender to verify circuit
8.5 Staff meetings
8.6 Labor-management committees

Fig. 2.11. (*cont.*)

According to linguistic pattern, the outline may be built from topical key words or full sentences. A sentence outline is really an intermediate step between a topical outline and the complete text. It briefs the whole report, provides a means for testing the logical order and coherence of statements and the validity of propositions. Figure 2.12 gives an example of one section of a sentence outline.

---

1. The Commander is responsible for all measures within his command.
   a. He determines the choice of position.
   b. He makes decision about the employment of materials and construction.
   c. He enforces camouflage discipline.

Fig. 2.12. Sentence outline

The writer needs to determine and stick to the outline form which best suits his purpose. No matter what form he selects, he must remember one fundamental principle: Since a topic is not divided unless there are at least two parts, an outline should have at least two headings in each order. If there is an *a* there must be a *b;* if there is a (1), there must be a (2).

WRITING THE MANUSCRIPT

When the final outline is complete, the writer goes to work on the draft of his report. He sits down and writes with sustained application. There are no short cuts to the burden of the task. In writing his monumental history of George Washington, Douglas Southall Freeman showed how method supports good literary craftsmanship. He plotted his work by the hour. He would lay the groundwork for a chapter, outline it in detail, criticize his outline, and then weave his notes into his prose. Finally, he would polish his style. He kept a logbook of the hours spent in developing a manuscript. Painstaking effort produces a report of high quality.

Figure 2.13 provides an operational guide to aid the writer in developing his report.

I. SUBJECT:

II. CENTRAL THESIS DEVELOPED IN REPORT:

III. CLARIFICATION OF ASSIGNMENT:
(Who wants what kind of a report? Why? When?)
A. Report assigned to ______________________
Name of writer

Fig. 2.13. Report writer's planning worksheet

on ______________________ by ______________________
Date Name of officer

under authorization dated ______________________
by ______________________.
Office, board, agency

B. Reason why the report is wanted:

IV. FOCUSED STATEMENT OF THE PROBLEM:
A. What it includes
B. What it excludes
C. Definition of terms

V. PROPOSED DISTRIBUTION AND CIRCULATION
Confidential ______________
General use ______________

Report to be delivered to ______________________
Name

______________ ______________ on ______________
Position Office Date due

Estimated number of copies to be prepared ______________

Report will be read by (primary audience)
1.
2.
3.
4.

Report will be of direct interest to (secondary audience)
1.
2.
3.

Report will possibly interest (tertiary audience)
1.
2.
3.

VI. MECHANICAL DETAILS
A. Report to be processed by

Typewriter-carbon paper	____	Multigraph	____
Photo copy	____	Letter press	____
Ditto	____	Offset	____
Mimeograph	____	Other	____
Multilith	____		

B. Manuscript instructions
Size of gross page: length ______" x width ______"
Left margin ______" Right margin ______"
Top margin ______" Bottom margin ______"
Dummy planned ______________

C. Estimated number of words
Double-spaced typewritten pages ______________
Dummy pages—words and spaces each line ______________
Lines each page ______________

Fig. 2.13. (*cont.*)

D. Time schedule

Date objective for first draft ——— ——— 195—
Month Day

Date objective for final draft ——— ——— 195—
Month Day

E. Provision for review

Committee members

1. , chairman
2.
3.
4.

F. Style guides

1. Speech level
   - Formal ———
   - Colloquial ———
   - Technical ———
2. Capitalization Suggestions

VII. ORGANIZATION OF WORKING TOOLS

A. Note system
B. Notebook
C. Manila folders and file
D. Classification and coding system
E. Outline type
   - Number-Letter ———
   - Pure Number ———
   - Sentence Type ———
   - Other ———

VIII. WORK SCHEDULE

A. Questions to be answered	B. Information needed to answer questions			C. Resources to be consulted	D. Operations necessary to obtain data, e.g., letters, schedules, bibliography	E. Time Plan
	Personal statements	*Documentary evidence*	*Real evidence*			

IX. WORKING OUTLINE

X. FINAL OUTLINE

Fig. 2.13. (*cont.*)

XI. SPECIALISTS TO REVIEW SECTIONS AND COMMENT

Specialist	*Section*

XII. SCHEDULE OF VISUAL AIDS TO BE PREPARED

Aid	*Plan for obtaining*

Fig. 2.13. (*cont.*)

LIBRARY REFERENCE GUIDE

The reference books listed in this appendix serve as working tools for report writers in their research. By the use of these basic volumes the report writer can find his way into any area of specialization.

1. CATALOG

Libraries keep a record of the books and documents in their collection in a *card catalog*. Well-organized libraries list each book alphabetically in three different ways, by the

1. *name of the author*
2. *title of the book*
3. *subject matter area*

If a writer does not understand the way the library card catalog works, he should ask a librarian to explain the system to him. Every good professional librarian will consider a request for assistance as an opportunity for service. An experienced research worker makes his librarian his confidant, adviser, and counselor. By running through the cards in the *subject matter* classification, a writer finds directions to the best sources of reference information. Almost every field has its special bibliographies, dictionaries, periodicals, and guide books. A first step is to discover these from the listings in the catalog and to use the basic reference volumes as a point of departure in further research. The card catalog lists these entries like this:

ART—*Bibliographies*
ECONOMICS—*Periodicals*
LAW—*Dictionaries*

From the card indexed by author's name, the writer can obtain biographical information about the dates of the author's birth and death, the gist of the book, the date and place of publication, the company publishing the book, the number of pages, and subjects under which the volume is cross-referenced. Two catalogs of foreign books list holdings and publications within Great Britain and France. These are

Catalogue, Department of Printed Books, British Museum, London
Catalogue General des Livres Imprimes, Bibliotheque Nationale, Paris

2. BIOGRAPHY

Because background information on persons involved in events is constantly necessary, a report writer finds the following sources useful in biographical inquiry:

American Men of Science, 8th ed. Lancaster: The Science Press, 1949.
Current Biography. New York: H. W. Wilson Company. Issued monthly and bound annually. Cumulative index 1940 to date.
Dictionary of American Biography. New York: American Council of Learned Societies (Scribner), 1937.
Directory of American Scholars. Lancaster: The Science Press, 1951.
Grove's Dictionary of Music and Musicians, 4th ed. New York: The Macmillan Company, 1940. Six volumes.
Leaders in Education, 3rd ed. Lancaster: The Science Press, 1948.
Poor's Register of Directors and Executives in the United States and Canada. New York: Standard and Poor Corporation, 1928 to date.
Who Was Who. Chicago: The A. N. Marquis Company, last published biographies-in-brief of biographies sketched in Who's Who in America, 26 biennial editions since Volume 1, 1899-1900.
Who's Who. London: A. and C. Black, 1849 to date. Annual listing of British leaders and some world personalities.
Who's Who in America. Chicago: The A. N. Marquis Company, 1899 to date. Revised biennially.
Who's Who in Engineering, 6th ed. New York: Lewis Historical Publishing Company, 1948.

City, regional, and professional directories often give information about persons not listed in these general volumes.

3. FACT BOOKS

Americana Encyclopedia. New York: Americana Corporation.
Columbia Encyclopedia. New York: Columbia University Press. One volume.
Encyclopaedia Britannica. Chicago: Encyclopaedia Britannica, Inc.
Encyclopedia of the Social Sciences. New York: The Macmillan Company.
Statesman's Year-book. London and New York: The Macmillan Company, 1864 to date. Annual. Statistical and historical facts.
Statistical Abstract of the United States. Washington: Government Printing Office.

Webster's Biographical Dictionary. Springfield, Mass.: G. & C. Merriam Co.

Webster's Geographical Dictionary. Springfield, Mass.: G. & C. Merriam Co.

Webster's New Collegiate Dictionary. Springfield, Mass.: G. & C. Merriam Co.

Webster's New International Dictionary, Unabridged. Springfield, Mass.: G. & C. Merriam Co.

World Almanac and Book of Facts. New York: *New York World-Telegram and Sun,* 1868 to date. Annual. List of associations and societies gives lead to specialized sources of information.

4. INDEXES

Agricultural Index. New York: H. W. Wilson Company, 1916 to date.

Art Index. New York: H. W. Wilson Company, 1929 to date. Fine arts, archaeology, architecture, and ceramics.

Cumulative Book Index. New York: H. W. Wilson Company, 1898 to date.

Education Index. New York: H. W. Wilson Company, 1929 to date.

Essay and General Literature Index. New York: H. W. Wilson Company, 1900 to date. Semi-annually cumulatively. Cumulative items 1900-1933 listed in 1933 volume.

How to Use Shepard's Citations. Colorado Springs: Shepard's Citations.

Index to Legal Periodicals. New York: H. W. Wilson Company, 1908 to date.

Industrial Arts Index. New York: H. W. Wilson Company, 1913 to date. Science, technology, engineering, and business periodicals.

International Index. New York: H. W. Wilson Company, 1907 to date. World periodicals on humanities and science.

Readers' Guide to Periodical Literature. New York: H. W. Wilson Company, 1900 to date.

Special Indexes

Engineering Index. New York: American Society of Mechanical Engineers, 1884 to date. Annual alphabetical index to subject and authors. Brief digest of articles.

The Public Affairs Information Service Bulletin. New York: The Public Affairs Information Service, 1915 to date. Weekly and bi-monthly bulletins bound cumulatively each year. Emphasis on political and social sciences and economics.

The New York Times Index. New York: *The New York Times,* 1913 to date. Bi-monthly: bound cumulatively each year.

Abstracts and Digests

Book Review Digest. New York: H. W. Wilson Company, 1905 to date. Monthly: annual and biennial cumulations; cumulative monthly index.

Chemical Abstracts. Easton: American Chemical Society, 1907 to date.

Psychological Abstracts. Lancaster: American Psychological Association, 1927 to date. Signed abstracts.

5. PUBLICATIONS, DIRECTORIES, AND UNION LISTS

American Newspapers. New York: H. W. Wilson Company, 1821-1936. Union list of files available in the United States and Canada.

N. W. Ayer & Son's Directory, Newspapers and Periodicals. Philadelphia: Ayer and Son, Inc., 1880-1949.

Cumulative Book Index. New York: H. W. Wilson Company, 1898 to date. Monthly except August; cumulative each year. Cumulative volumes supplement and form part of United States Catalog listing all books printed in the United States.

International Yearbook: Directory of American and Foreign Journals. New York: Editor & Publishers. Annual, last January weekly issue, 1920 to date.

The Publishers Trade List Annual. New York: R. R. Bowker Company (Publishers Weekly), 1873 to date.

Ulrich's Periodicals Directory. New York: R. R. Bowker Company, 1947. Classified guide to selected list of current domestic and foreign periodicals.

Union List of Microfilms. Ann Arbor: J. W. Edwards.

Union List of Serials. New York: H. W. Wilson Company, 1943 with 1945 supplement.

6. SEARCH BOOKS

Coman, Edwin T., Jr., *Sources of Business Information.* Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1949.

Davis, Marjorie V., *Guide to American Business Directories.* Washington: Public Affairs Press, 1948.

Hauser, Philip M. and William R. Leonard, *Government Statistics for Business Use.* New York: John Wiley & Sons, 1946.

7. COMMERCIAL, FINANCIAL, AND TECHNICAL SERVICES AND SOURCES

Directory of International Scientific Organizations. Paris: Unesco, 1950.

Editor and Publisher Market Guide. New York: Editor & Publishers, 1924 to date. Newspaper markets by state and city.

Handbook of Scientific and Technical Societies and Institutions in the United States and Canada, 5th ed. Washington: National Research Council, 1948.

Industrial Research Laboratories of the United States, 8th ed. Washington: National Research Council, National Academy of Sciences.

Market Data Book. Chicago: Advertising Publishers, 1920 to date. Industrial and trade markets, business publishers, and advertising agencies.

Other Services

Commerce Clearing House includes:

Automobile Insurance Law
Aviation Law
Bankruptcy Law
Carriers—Federal and State
Congressional Index
Congressional Legislative Reporting
Federal Administrative Procedure
Federal Carriers Case Series—ICC
Federal Contract Cases

Fire and Casualty Insurance Law
Food, Drug, and Cosmetic Law Quarterly
Food, Drug, and Cosmetic Law Reporter
Government Contracts Reporter
Insurance Cases
Liquor Controls Law
Negligence Law
Public Utilities
Railroad Unemployment Service
Workmen's Compensation Law

Moody's Investors Service includes:

Moody's Banks and Finance—banks, insurance, real estate, investment trusts
Moody's Bond Record
Moody's Bond Survey
Moody's Dividend Record
Moody's Governments and Municipals
Moody's Industrials
Moody's Manual of Investments, American and Foreign
Moody's Public Utilities
Moody's Railroads
Moody's Stock Survey

Prentice-Hall includes:

American Labor Arbitration Awards
American Labor Cases
Capital Adjustments
Corporation Service
Federal Aids to Finance
Federal Bank Service
Federal Regulations on Income and Excess Profits Taxes
Federal Security Regulations
Federal Tax
Federal Tax Citator
Federal Trade and Industrial
Income Tax Laws
Inheritance and Transfer Tax
Installment and Conditional Sales
Labor
  Employees Relations and Arbitration
  Union Contracts and Collective Bargaining
  Personnel Policies and Practices Labor Guide
Oil and Gas Taxes
Payroll Service
Pensions and Profit Sharing
Property Taxes
Real Estate
Sales Taxes
Securities Regulations
State and Local Tax

Stock Transfer
Tax Court Decisions
Tax Ideas
Trusts
Unemployment Insurance
Wills, Estates and Trusts

Standard and Poor's includes:

Called Bond Record
Daily Dividend Record
Standard Corporation Records
Trade and Securities

8. COMPREHENSIVE BOOK GUIDES

Guide to Reference Books, 7th ed. Chicago: American Library Association, 1951. Manual, edited by Constance Winchell and continuing Isadore Mudge lists, indexes and briefly described reference works in all fields. Volume designed for library reference assistants and students.

Legal Bibliography and Legal Research. Washington: National Law Book Company, 1947; 1949 supplement. Guide to American Law books and legal research.

Standard Catalog for Public Libraries. New York: H. W. Wilson Company, 1940; supplement 1941. Inclusive but selected list of books in all fields. Subject arrangement, analytically indexed.

9. GOVERNMENT DOCUMENTS AND INDEXES

Catalog of Public Documents of Congress and of all Departments of the Government of the United States (short title: *Document Catalog*). Washington: Government Printing Office, 1893-1945 Discontinued, but valuable for the period covered.

Congressional Record. Washington: Government Printing Office, 1873 to date. Daily issue of proceedings of Congress when in session. Cumulative by session volumes. Index volumes give separate Senate and House bills and resolutions by number.

Digest of Public General Bills. Washington: Government Printing Office, 1936 to date. Issued during sessions of Congress. Federal Law Section, Legislative Reference Service, Library of Congress. Excellent index.

Monthly Check-List of State Publication. Washington: Government Printing Office, 1910 to date. Library of Congress listing.

Official Congressional Directory. Washington: Government Printing Office. 1809 to date. Irregularly issued, usually each session of Congress.

Source Materials of Federal Law—a guide to where and how to find them. Washington: Federal Bar Association Journal, 1951.

United States Federal Register. Washington: Government Printing Office. Daily since March 12, 1936. Monthly, quarterly, and annual indexes; official gazette.

United States Government Organization Manual. Washington: National Archives, Federal Register Division, 1935 to date. Irregularly issued.

United States Government Publication: Monthly Catalog. Washington: Government Printing Office, 1895 to date. Monthly with cumulative index; annual cumulation with year's index.

United States Laws and Statutes. Code of the Laws of the United States of America. Washington: Government Printing Office, 1947-1948, five volumes with annual supplements. General index. Consolidates all general and permanent laws.

10. UNITED NATIONS

Checklist of United Nations Documents. New York: United Nations Secretariat, 1949 to date. Detailed subject index.

United Nations Document Index. New York: United Nations, 1950. Checklist and index, index cumulated annually.

United Nations Documents, 1941-1945. London: Royal Institute of International Affairs, 1946.

11. AUDIO-VISUAL MATERIALS

American Television Directors. New York: American Television Society, 1946 to date. Official yearbook.

Association of School Film Libraries Catalog. New York: Association of School Film Libraries, 1939 to date. Looseleaf.

Broadcasting Yearbook. Washington: Broadcasting Publications, 1935 to date. Lists AM, FM, and TV stations, network personnel, advertisers, agencies handling programs, production companies, and FCC rules.

Check-List of Recorded Songs in the English Language. Washington: Division of Music, Library of Congress, to July, 1940.

Educational Film Guide. New York: H. W. Wilson Company, 1936 to date.

Educational Film Library Association Evaluations. New York: Educational Film Library Association, 1946 to date.

Educator's Guide to Free Films. Randolph, Wisconsin: Educators Progress Service, 1941 to date. Subject and title index.

Filmstrip Guide. New York: H. W. Wilson Company, 1948 to date.

Ideas on Film. New York: *Saturday Review*, January 27, 1952. List of 215 film libraries.

Industrial Film Bibliography. Chicago: National Metal Trades Association, 1947 to date. List of films for industrial training.

Motion Pictures, 1912-1939. Washington: Government Printing Office, 1951. Catalog of copyright entries, cumulative series. Comprehensive index. Supplement, 1940-1949, cumulative volume. Original issue kept current by *Catalog of Copyright Entries; Motion Pictures and Filmstrips.*

New York Museum of Modern Art Film Library Bulletin. New York: Museum of Modern Art, 1941 to date.

On the Record. New York: *Saturday Review*, regular department weekly issue.

Quarterly Record List. Musical Quarterly. New York: G. Schirmer, Inc., January 1935 to date.

Radio Annual. New York: *Radio Daily*, 1939 to date.

Recordings for School Use. Yonkers-on-the-Hudson: World Book Company, 1942 to date. Catalog of appraisals.

Television Broadcasters Association Official Yearbook of the Television Industry. New York: Television Broadcasters Association. Proceedings of annual conference, 1944-1945 to date,

Training Film Annual. Cleveland: Commercial Films, 1949 to date. Sound slide film catalog.
World Radio and Television Annual. London: S. Low Marston, 1947 to date.

READINGS

GENERAL

Beak, G. B., *Indexing and Précis Writing.* London: The Macmillan Company, 1930.
Brown, George E., *Indexing.* New York. H. W. Wilson Company, 1921.
Distribution Data Guide. Washington: Department of Commerce. Issued monthly; subject-indexed and cross-referenced semiannually as supplements to July and January issues.
Dolch, Edward W., *Outlining for Effective Writing.* New York: Harper & Brothers, 1923.
Hammond, Kenneth R. and Jeremiah M. Allen, Jr., *Writing Clinical Reports.* Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1953.
Jenke, Grace E., *A Study of Précis Writing as a Composition Technique.* New York: Teachers College, 1939.
Keysort Punching and Sorting Manual. New York: The McBee Company, 1953.
Technique of Military Instruction, Army Field Manual 21-6. Washington: Government Printing Office, 1954, pp. 29-35.

HISTORY

Gottschalk, Louis, *Understanding History.* New York: Alfred A. Knopf, 1950.
Guide to the Writing of American Military History. Washington: Department of the Army, 1951.
Theory and Practice in Historical Study. New York: Social Science Research Council, 1936.

LAW

Model Code of Evidence. Philadelphia: American Law Institute, 1942.

REPORTING

MacDougall, Curtis D., *Interpretative Reporting.* New York: The Macmillan Company, 1950.

SCIENTIFIC METHOD

Beveridge, W. I. B., *The Art of Scientific Investigation.* London: William Heinemann, Ltd., 1950.
Fisher, Ronald A., *The Design of Experiments.* Edinburgh: Oliver & Boyd, 1949.
Good, Carter V., and Douglas E. Scates, *Methods of Research.* New York: Appleton-Century-Crofts, Inc., 1954.
Mann, H. B., *Analysis and Design of Experiments.* New York: Dover Publications, 1949.

RITCHIE, A. D., *Scientific Method.* New York: Harcourt, Brace & Company, 1923.

STATISTICAL OPERATIONS

BERELSON, BARNARD, *Content Analysis in Communications Research.* Glencoe: Free Press, 1951.

BLANKENSHIP, ALBERT B., ed., *How to Conduct Consumer and Opinion Research: The Sampling Survey in Operation.* New York: Harper & Brothers, 1946.

BUTSCH, R. L. C., *How to Read Statistics.* Milwaukee: Bruce Publishing Company, 1946.

FISHER, RONALD A., *Statistical Methods for Research Workers,* 11th ed. Edinburgh: Oliver & Boyd, Ltd., 1950.

PAYNE, STANLEY, *The Art of Asking Questions.* Princeton: Princeton University Press, 1951.

POOL, JOSEPH ITHIEL DE SOLA, *Symbols of Internationalism.* Stanford: Stanford University Press, 1951.

SOCIAL SCIENCE RESEARCH

LERNER, DANIEL, and HAROLD D. LASSWELL, eds., *The Policy Sciences.* Stanford: Stanford University Press, 1951.

LUNBERG, GEORGE A., *Social Research.* New York: Longmans Green & Company, 1951.

MARKETING RESEARCH

Check List for the Introduction of New Consumer Products. Washington: Department of Commerce, 1946.

Check List to Help You Introduce Your New Industrial Products. Washington: Department of Commerce, 1946.

How to Make a Local Area Trade Survey. Washington: United States Chamber of Commerce, 1948.

LARSON, GUSTAV E., *Developing and Selling New Products.* Washington: Department of Commerce, 1950.

LARSON, GUSTAV E., and MARSHALL N. POTEAT, *Selling the United States Market.* Washington: Government Printing Office, 1951.

RANDALL, LOIS E., and DOROTHY M. SHARPNACK, *Market Research Sources: A Guide to Domestic Marketing.* Washington: Department of Commerce, 1950.

RESEARCH PAPERS

BELL, REGINALD W., *Write What You Mean.* London: Allen & Unwin, 1954.

GRIFFITH, THOMAS PUGH, *Guide to Research Writing.* Boston: Houghton Mifflin Company, 1955.

HOOK, LUCYLE, *The Research Paper.* Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1952.

Jam Handy Organization, *Writing a Research Paper.* Filmstrip. Yellow Springs: Antioch College Film, 1952.

TRY YOUR HAND AT THESE •

- **to practice formulating a report subject**
- **to set up a note system**
- **to develop a work plan**
- **to acquire skill in making outlines**
- **to become more familiar with the library**
- **to develop a report plan**

1. Bring to sharp focus a proposal to write a research report on a problem of special interest to you or one which fits in as a part of a project. Review Chapter 15, "Memorandum." Then, in a memorandum, make a precise statement of the research problem as you propose to study it.
2. Read Chapter 14, "Letters." Then write a letter using any letter format which appeals to you. In this letter, explain in detail how you have set up your note system, how it works, and how it is keyed to your outline pattern.
3. For the rest of your life *your* career will be one of your primary concerns. Set up a cumulative note file system on your career subject, which you may wish to keep current for years to come. Describe your system in a memorandum.
4. Decide what kind of an outline form you are going to use. Then write a letter explaining why you have selected this pattern and how it works.
5. Prepare a selective bibliography on your career interest.
6. Using the "Report Writer's Planning Worksheet," submit a working plan for your research report.
7. You are asked to prepare a report to forecast the market for a new product. By the use of the schedule given in Figure 2.6, prepare a report on any product of special interest to you. If you have no preference, discuss the pocket-sized transistor radio.

3

CASE HISTORY: ORGANIZATION OF IDEAS

A CASE HISTORY WILL SHOW THE PAINSTAKING METHOD FOLLOWED BY AN outstanding report writer of the National Resources Planning Board in the organization of his ideas. The exhibits demonstrate how carefully he built his plan, how he weighed the relative importance of his topics and allocated space, and how meticulously he executed his assignment.

FORMULATION OF REPORT'S CENTRAL THEME

On October 12 Samuel H. Thompson sat down with pad and pencil to think about his assignment. He proposed to formulate the central idea of the report in a concise thesis sentence. Doodling on his pad, he jotted down ten possible focal statements (Figure 3.1) which expressed the subject of the report due on December 1. He studied this array, as shown in

Figure 3.1, and checked the ninth alternative as being the one which seemed to state the central idea he wanted to communicate to his readers. His mind had located its target; he was going to write about "Energy and Men-at-Work."

10/12/

Coal, oil, natural gas, water power.

Use of energy resources.

Energy, power, and modern economy

Energy, power, production

Supply and consumption of power and energy

Energy, power, man-hours, and consumption

Energy, men-at-work, and goods

Energy, power, men, and goods

Energy and men-at-work

Energy, power, and men

Fig. 3.1. Doodle sheet used to work out central idea

DRAFTING THE WORKING OUTLINE

Thompson kept thinking over his subject. By the next day he saw his plan more clearly. He restated his basic theme. He was going to write about "Energy, Production, and Man Power." At once he began to break his general topic into units. He blocked out the divisions of his subject, subdivided these divisions into subsections, and estimated the number of words and double-spaced typewritten pages which the five divisions of

10-13

Outline for Energy Resources Section
of Dec. 1, 19 Report[1/]

ENERGY, PRODUCTION, AND MAN-POWER

		Estimate of space, Words	Double-spaced typing, pp.
(1)	National policy for energy resources and power supply	1000 ~~1000~~	4
	(a) Energy, enterprise, and the peoples' needs	400	
	(b) Defense: ~~the~~ First national enterprise	250	
	(c) Power, production, geography, and people	350	
(2)	Coal: men and jobs	625	2½
	(a) Immediate needs for defense	150	
	(b) Men and jobs and carbon	250	
	(c) Long-range requirements for national needs	225	
(3)	Petroleum and natural gas: A Problem in Prudence	625	2½
	(a) Consumption and supply	150	
	(b) What do we know of reserves?	300	
	(c) Emergency and long-range needs	175	
(4)	Water power: Inexhaustible energy and river control	625	2½
	(a) Water power is inexhaustible but limited	150	
	(b) Power for defense	175	
	(c) A longer view: power, water, and people	300	
(5)	Electric power: Means of modern production	875	3½
	(a) Electric power and productivity	200	
	(b) Electric power for defense: organization a national ~~system of~~ supply	325	
	(c) Power, labor, production, and people	350	
		3750	15

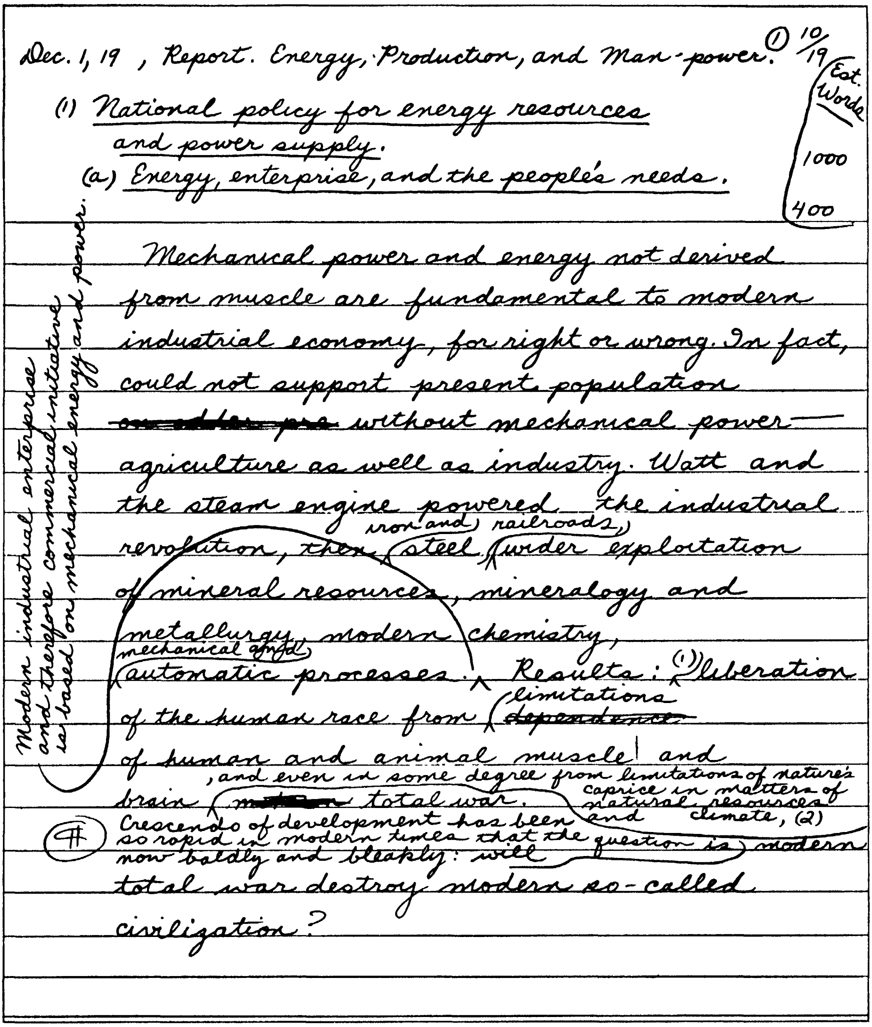
1/ A staff report, based on and supported by the actions of the appropriate technical committees of the Board.

Fig. 3.2. Working outline

the final manuscript copy would require. Thus he developed his first draft of a working outline (Figure 3.2).

STATING IDEAS FOR CRITICISM

During the next week the writer proceeded with his research. He digested his information. He began to put his ideas down on paper with a


Dec. 1, 19 , Report. Energy, Production, and Man-power. (1) 10/19

Est. Words

(1) National policy for energy resources and power supply. 1000

(a) Energy, enterprise, and the people's needs. 400

Modern industrial enterprise and therefore commercial initiative is based on mechanical energy and power.

Mechanical power and energy not derived from muscle are fundamental to modern industrial economy, for right or wrong. In fact, could not support present population ~~on older pre~~ without mechanical power— agriculture as well as industry. Watt and the steam engine powered the industrial revolution, then iron and steel railroads, wider exploitation of mineral resources, mineralogy and metallurgy, modern chemistry, mechanical and automatic processes. Results: (1) liberation of the human race from limitations ~~dependence~~ of human and animal muscle and brain, and even in some degree from limitations of nature's caprice in matters of natural resources and climate, (2) total war.

Crescendo of development has been so rapid in modern times that the question is now baldly and bleakly: will modern total war destroy modern so-called civilization?

Fig. 3.3. Idea skeleton for discussion

telegraphic conciseness (Figure 3.3). Always keeping the due-date of his report before him, as can be seen by the entry in the top left-hand corner, he wanted to submit his ideas in their naked form to himself and to some of his colleagues for criticism. Hence he deliberately divorced ideas from grammatical presentation. At this point he wanted searching comment on the integrity and correctness of his reasoning.

His worksheet was therefore an "idea skeleton," a sort of telegraphic memorandum for the discussion of ideas. The interlineations indicate the extent to which the criticism of his colleagues and his own further thinking influenced the development and revision of his ideas.

TYPEWRITTEN SECTION UNITS

The writer now has his telegraphic notes typewritten. He leaves wide margins for notes; he wants to see how each idea looks on a page by itself. Working constantly in terms of word-counts and the deadline date, he builds his copy to fill the space as he has mapped it out (Figure 3.4).

Dec.1,19 , Report, Energy, Production, and Man-power SHT - 10/19/

-1-

Estimated Words

? (1) <u>National policy for energy resources and power supply.</u> 900 ~~1000~~

(a) <u>Energy, enterprise, and the peoples' needs.</u> 300 ~~400~~

Mechanical power and energy not derived from muscle are fundamental to modern industrial economy, for right or wrong. In fact, could not support anything like present population without mechanical power - agriculture as well as industry. Watt and the steam engine powered the industrial revolution; then iron and steel, railroads, wider exploitation of mineral resources, mineralogy and metallurgy, modern chemistry, mechanical and automatic processes. Modern industrial enterprise and therefore commercial initiative is <u>based</u> on mechanical energy and power. Results: (1) liberation of the human race from limitations of human and animal muscle and brain, and even in some degree from limitations of nature's caprice in matters of natural resources and climate; (2) total war.

Crescendo of power development has been so rapid in modern times that the question is now baldly and bleakly: will modern total war destroy modern so-called civilization?

Transfer 100 words to the end section

Fig. 3.4. Idea unit typewritten with wide margins

FINAL DRAFT OF OUTLINE

Ten days pass as Thompson works on his report. Now he is ready to map the final report with a matured plan of action (Figure 3.5). He proceeds to put down his ideas on separate sheets. He is still presenting his ideas without literary form. He is still thinking.

11/11/ Part II - Chapter 6 ~~SMT - 10/28/~~

~~Outline for Energy Resources Section of Dec. 1, 19 Report~~ 1/

ENERGY, PRODUCTION, AND MAN-POWER 1/

		Words		Estimate of space Double-spaced typing, pp
(1)	National policy for energy resources and power supply		750	3
	(a) Energy, enterprise, and the people's needs	200		
	(b) Defense: First national enterprise	250		
	(c) Energy ~~Power, production,~~ geography, and people	350		
(2)	Coal: Men and jobs		625	2½
	(a) Immediate needs for defense	150		
tr	(~~c~~ b) Men and jobs and carbon	250		
	(~~b~~ c) Long-range trends in coal ~~requirements for national needs~~	225		
(3)	Petroleum and natural gas: A problem in prudence		625	2½
	(a) Consumption and supply	150		
tr.	(~~c~~ b) What do we know of reserves?	300		
	(~~b~~ c) Emergency and long-range needs	175		
(4)	Water power: Inexhaustible energy and river control		825	3½
	(a) Water power is inexhaustible but limited	350		
	(b) Water power for defense	175		
	(c) A longer view: Power, water, and people	300		
(5)	Electricity: Means of modern production		1250	5
	(~~a~~ b) Electric power and productivity	300		
	(~~b~~ a) Electric power for defense: Organization of a national supply	450		
	(c) Power, labor, production, and people	500		
			4075	16½

1/ A staff report, based on and supported by the actions of the appropriate technical committees of the Board.

Fig. 3.5. Final outline

REDRAFT OF IDEA SUMMARY

On the basis of his final outline, he redrafts his idea summaries. (Figure 3.6). Again he leaves wide margins for the revision of his ideas.

WRITING THE MANUSCRIPT

Upon the foundations of this solid preliminary work the writer is at last ready to draft his manuscript. He has digested his facts. He has reflected

Dec.1,19 ,Report - Energy, Production, and Man-power ~~SHT - 10/28/~~

-1-

	Estimated Words
(1) National policy for energy resources and power supply.	800
(a) Energy, enterprise, and the people's needs.	200

Mechanical power and energy not derived from muscle are fundamental to modern industrial economy. Could not support anything like present population without mechanical power - agriculture as well as industry. Watt and the steam engine powered the industrial revolution; then iron and steel, ~~railroads, wider~~ exploitation of mineral resources, mineralogy and metallurgy, modern chemistry, mechanical initiative ~~is~~ are based on mechanical energy and power. Results: (1) liberation of the human race from limitations of human and animal muscle and brain, and even in some degree from limitations of nature's caprice in matters of natural resources and climate; (2) total war.

~~and the water wheel~~

~~Water power also~~

and automatic processes. Modern large-scale industrial enterprise and therefore commercial

Crescendo of power development has been so rapid in modern times that the question is now baldly and bleakly: will modern total war destroy modern so-called civilization or will machine-power be controlled to produce the goods and the services and the jobs that the people want and need?

Fig. 3.6. Redraft of idea summary and final copy

~~amt~~ - 11/8/

Part II - Ch 6

ENERGY, PRODUCTION, AND MAN-POWER

1. National Policy for Energy Resources and Power Supply

It is a commonplace to say that a modern industrial economy like that of the United States is founded on mechanical power and energy not derived from muscle. The goods and services required by our 130 million people could not possibly be made by muscle alone. Energy derived from coal, petroleum, natural gas, or water power is fundamental.

(a) Energy, enterprise, and the peoples' needs.

Watt and the steam engine powered the industrial revolution hardly more than a century ago— a century of iron and steel, of railroad building, of exploitation of mineral and forest resources. Non-muscular energy applied through mineralogy and metallurgy, through modern chemistry, and finally through automatic processes can produce enormously greater quantities of goods and services than could be made by muscle and also goods and services that muscle could not make at all. Modern industrial enterprise and, therefore, commercial initiative are based on mechanical ~~and~~ and electrical energy. Among the results to date are (1) liberation of the human race from limitations of human and animal muscle and brain, and even in some degree from the limitations of nature's caprice in matters of natural resources and climate; (2) total war.

Machine power has made possible warfare between whole nations on a continental scale. The question for this generation and the next is whether machine power can be controlled to produce, not warfare, but the goods and the services and the jobs that the people want and need.

Fig. 3.7. Manuscript typed

upon them until the presentation has the qualities of clearness, unity, and coherence in his mind. He has subjected his ideas to criticism. He has reviewed the logic of his presentation by spelling out his ideas on unit sheets. He knows the relative importance of each section and its word length. Now his final writing proceeds quickly and easily because his clear thinking has made possible clear writing.

He delivered his manuscript on time.

TRY YOUR HAND AT THESE •

- **to practice formulating a central theme**
- **to prepare a working outline for a manuscript to meet space requirements**
- **to provide a discipline in composition**

PART III

4. ENERGY, PRODUCTION, AND MANPOWER[1]

National Policy for Energy Resources and Power Supply

It is a commonplace to say that a modern industrial economy like that of the United States is founded on mechanical power and energy not derived from muscle The goods and services required by our 130 million people could not possibly be made by muscle alone Energy derived from coal, petroleum, natural gas, or water power is fundamental

Energy, Enterprise, and the People's Needs

Watt and the steam engine powered the industrial revolution hardly more than a century ago—a century of iron and steel, of railroad building, of exploitation of mineral and forest resources Nonmuscular energy applied through mineralogy and metallurgy, through modern chemistry, through electricity, and finally through automatic processes can produce enormously greater quantities of goods and services than could be made by muscle, and also goods and services that muscle could not make at all Modern industrial enterprise and, therefore, commercial initiative are based on mechanical and electrical energy. Among the results are (1) liberation of the human race from limitations of human and animal muscle and brain, and even in some degree from the limitations of nature's caprice in matters of natural resources and climate, and (2) total war.

Machine power has made possible warfare between whole nations on a continental scale The question for this generation and the next is whether machine power can be controlled to produce, not warfare, but the goods and the services and the jobs that the people want and need.

Fig. 3.8. The printed page

1. An editor invites you to prepare a manuscript of 1200 words giving the result of your market study based on the schedule in Figure 2.6. Following the procedure discussed in the case history document presented in this chapter, develop the report to the writing stage. Your work papers should include your doodle sheet on which you worked out your central idea, the development of the outlines, the schedule for allocating space weight to the various topics, the idea skeleton for discussion, the idea units as typewritten with wide margins for further correction and comment, the final outline, and the redraft of the idea summary.
2. Write the 1200-word report.

4

CLEAR STATEMENT

A GOOD WRITER PRODUCES EASY-TO-READ REPORTS BY MAKING CLEAR statement. He sees sharply what he wants to say. He says directly what he sees. He edits severely what he writes. He thinks straight, talks plain, and takes pains to ease his reader's visual task.

The size and complexity of modern organization and the necessity for shaping policies to cope with the tempo of contemporary change combine to create a demand for linguistic clarity and visual simplicity. Business today places a premium on competent skills in writing and reading. The effectiveness of written presentation is called *readability;* the skill with which a person reads a report is his *reading ability. Improvement in presentation* helps the reader to grasp more quickly and exactly what the writer says. *Improvement in reading skill* enables the reader to comprehend the writer's ideas more quickly.

The modern executive must read abundantly, but he must also read selectively and carefully. For this reason, increasingly serious scientific attention is being given to the problem of increasing the *speed* at which people read and the rate at which they *comprehend.* This interest in helping people to read faster or better, has led to the establishment of reading laboratories, reading improvement training and advisory services, reading counselors, remedial reading programs, and to the production of devices, tests, films, machines, and optical apparatus to encourage reading improvement. Gadgets range from the reading rate controller, which mechanically moves lines into the field of vision by measured acceleration, to a machine called the "tachistiscope," which flashes digits on a screen to increase the width of what the eye grasps. Harvard University has designed films to help readers, and optical companies are producing the opthalmograph, which diagnoses eye movements by taking photographic records of such physical operations as fixation and regression. As corporate policy, industrial firms like General Motors place new emphasis on reading skills and writing habits.

Side-by-side with this concern for improvement in reading ability has come the professional interest in better writing. Robert Gunning Associates, for example, serve as professional counselors on the subject of clear writing. Since its formation in 1944, the firm has worked with the staffs of dozens of publications and industrial corporations from coast to coast. The work of Rudolf Flesch in promoting readability has become so well known that "fleschіng" has emerged as a verb readily understood as meaning "measuring the difficulty of a piece of writing."

While he was in federal government service in World War II, Flesch gave a classic example to illustrate what clear statement means. A price control regulation defined "ultimate consumer" in these 58 words:

> Ultimate consumer means a person or group of persons, generally constituting a domestic household, who purchase eggs generally at the individual stores or retailers or purchase and receive deliveries of eggs at the place of abode of the individual or domestic household from producers or retail route sellers and who use such eggs for their consumption as food.

Flesch translated this definition into a clear statement of ten words:

> Ultimate consumers are people who buy eggs to eat them.

Or, to wrap up the idea in another eggshell, we might mention the state university home economist who gave farmers' wives these instructions for removing the contents without destroying the shell: "Take an egg. Carefully perforate the basal end. Then duplicate the process in the apex. Then, applying the lips to one of the apertures and by forcibly exhaling the breath, discharge the shell of its contents." Old Aunt Cissie, who had been

istening carefully, turned to Grandma Abigail and whispered: "Beats all ıow different these new fangled ways is. When I was a girl, we just poked ı hole in each end—and blowed!"[1]

SPENCER'S PHILOSOPHY OF STYLE

More than a century ago, and long before the concept of readability was coined, Herbert Spencer spelled out some principles basic to clear statement. He asserted as his fundamental proposition the idea that the writer owes his reader a courtesy: "economy in attention." Said Spencer, in substance:

1. A writer ought to save his reader time.
2. He should enable his reader to grasp his ideas with the "least possible mental effort."
3. Language makes the clearest statement when, like an efficient machine, it performs on the principle that "the more simple and better arranged the parts, the greater will be the effect produced."
4. An advantage exists in expressing an idea in the smallest number of words and in the smallest number of syllables.
5. Friction and inertia in language can be reduced by
   a. the right choice and placement of words
   b. the best arrangement of clauses in a sentence
   c. the proper order of purposeful and subordinate propositions.
6. In every sentence, the sequence of words should present the constituents of the thought in the order most convenient for the building up of that thought.
7. In every sentence, there is some one order of words more effective than any other. This order presents the elements of the proposition in the most cohesive succession. As in a narrative, the events should be stated in such sequence that the mind may not have to go backwards and forwards in order rightly to connect them.
8. In a sentence the words and expressions most nearly related in thought should be brought closest together.
9. In a group of sentences, the arrangement of ideas should be such that each of them may be understood as it comes, without waiting for subsequent ones.
10. In achieving economy of the reader's attention, some ways of dividing and presenting a subject will be more striking and effective than others, irrespective of logical cohesion.

[1] Adapted from Robert P. Court, "How to Get an Idea Across," *Effective Communication on the Job* (New York: American Management Association, 1956), p. 88.

11. The concrete word is preferable to the abstract, because abstractions require the reader's effort in hanging an idea on an image. A writer should avoid a sentence such as this:

> In proportion as the manners, customs and amusements of a nation are cruel and barbarous, the regulations of their penal code will be severe.

The writer should use image-creating words.

> As men delight in battles, bullfights, and combats of gladiators, so will they punish by hanging, burning, and the rack.

12. "Non-Latin" or Saxon English words express ideas with forcefulness because readers are more familiar with the vocabulary, because the association between the word and the image which it evokes is better established, because they are comparatively short, and because they are more apt to be concrete than abstract.*

The pattern for expressing clear ideas in plain words, as Herbert Spencer explained it, has been stated and restated by generations of writers. In a little volume written at the request of the British Treasury, Sir Ernest Gowers recommends three rules to guide writers on how best to convey meaning without ambiguity. He says:

1. Use no more words than are necessary to express your meaning.
2. Use familiar words rather than far-fetched.
3. Use words with a precise meaning rather than those that are vague.[2]

The King's English opens with the classic statement that

> anyone who wishes to become a good writer should endeavor . . . to be direct, simple, brief, vigorous, and lucid. . . . The words to be chosen are those that the probable reader is sure to understand without waste of time and thought.[3]

Sir Arthur Quiller-Couch lays down three rules to apply in the construction of straight prose when he says:

1. Almost always prefer the concrete word to the abstract.
2. Almost always prefer the direct word to the circumlocution.

* See Lane Cooper, *The Art of the Writer* (Ithaca: Cornell University Press, 1952), Chapter XIII, pp. 236-71 for full text of Herbert Spencer's essay, "The Philosophy of Style." The essay originally appeared in the *Westminster Review*, October 1852.

[2] Sir Ernest Gowers, *Plain Words* (London: H. M. Stationery Office, 1952), p. 34.

[3] H. W. Fowler and F. G. Fowler, *The King's English* (Oxford: Clarendon Press, 1908), pp. 1, 3.

3. Generally use transitive verbs that strike their object; and use them in the active voice. . . . For as a rough law, by his use of the straight verb and by his economy of adjectives you can tell a man's style, if it be masculine or neuter, writing or "composition."[4]

HOW GUNNING CUTS THROUGH THE "FOG"

Robert Gunning cuts through what he calls "fog" by applying these ten principles to the building of clear statement:

1. Keep sentence average short—twenty words or less.
2. Keep sentences variable.
3. Prefer the simple to the complex.
4. Prefer the familiar to the far-fetched.
5. Keep verbs active.
6. Avoid unnecessary words.
7. Use words the reader can picture.
8. Relate the communication to the reader's experience.
9. Write as you talk.
10. Write to express rather than to impress.[5]

HOW FLESCH WRITES "PLAIN TALK"

Rudolf Flesch says that "plain talk" is chiefly a question of language structure and the spacing of ideas. As his recipe, he advises writers to use short sentences with many root words.[6] He says:

COPY is *hard* to read and understand if it has

1. long involved sentences
2. abstract words with many affixes and
3. few or no personal references.

COPY is *easy* to read and understand if it has

1. short simple sentences
2. simple concrete words with few affixes and
3. many personal references.[7]

[4] Sir Arthur Quiller-Couch, *On the Art of Writing* (New York: G. P. Putnam's Sons, 1943), p. 166.
[5] Robert Gunning, *The Technique of Clear Writing* (New York: McGraw-Hill Book Company, Inc., 1952), p. 38.
[6] Rudolf Flesch, *The Art of Plain Talk* (New York: Harper & Brothers, 1946), p. 66.
[7] *Writing for the Millions! A Study of What Makes It Hard or Easy to Read* (New York: Macfadden Publication).

Newsweek wants "simplicity in writing." What does *Newsweek* mean by "simplicity?" Here is the catalog of requirements:

1. simple, direct, untwisted sentence structure unburdened with clauses, adjectives, and encumbrances
2. short sentences of about 18-word average length
3. vivid and concrete words which avoid affixes and abstractions
4. action verbs conveying personality and doing the work of adjectives
5. fewer adjectives, the action itself doing the work of the adjectives.[8]

DEVELOPMENT OF PERSONAL STYLE

When the rules for clear writing are studied together, three common factors emerge: (1) orderly thinking, (2) the careful choice of words, and (3) the painstaking construction of the sentence. As a writer gains competence in writing reports, he develops a style of his own. Sir Arthur Quiller-Couch observes that style "essentially resembles good manners. . . . It comes of endeavoring to understand others, of thinking for them rather than for yourself—of thinking, that is, with the heart as well as the head."[9]

DEVICES TO AID CLEAR STATEMENT

A writer devises appropriate methods to strengthen his skill in making clear statement. The most important procedure is the construction of the paragraph for quick reading and thorough comprehension.

A writer who bears his reader's interest in mind builds each phrase, each sense grouping of words around the *key words* most important to explain his idea. These key words are the nuclei of his sentences. Just as the sentence has key words around which its meaning is built, so the paragraph is built around a *central thought.* This central thought ought to be clear to the reader. By looking for the *key words in the sentence* and the *central thought in the paragraph,* the reader gets the writer's message. The importance of *idea sequence* and *word relationship* in communication can be appreciated when the writer realizes that at one pause in the movement of the eye, a good reader, reading well-written prose, can take in four unrelated letters or two unrelated words (10 letters) or one phrase of six related words (30 letters)! The writer who consciously designs his sentences with attention to the relationship of phrase-units in thought takes a long step in the direction of clear statement.

SIGNALS TO GUIDE THE READER

A writer further helps his reader by placing along the reading path devices to alert and guide the reader's eyes. These devices are really

[8] *What Newsweek Wants* (New York: *Newsweek*), p. 16.
[9] Quiller-Couch, *On the Art of Writing,* p. 86.

signals warning the reader of the approach of important divisions in the organizational development. The writer's chief gadgets for giving these signals to his reader are:

1. Type styles and sizes
    a. CAPITAL LETTERS FOR CHAPTER HEADINGS
    b. **Bold face for sectional divisions within chapters**
    c. *Italic*
        1. *for subtitles within sectional divisions*
        2. *for emphasis within a sentence to indicate important concepts or phrases*
2. Tabulation in numerical sequence
    a. Here is an example:
        The basic steps in the production of Buna S from butadiene and styrene are:
        1. *Emulsification*
        2. *Polymerization*
        3. *Coagulation*
        4. *Collection*
    b. Frequently the enumeration is written out:
        First,
        Second,
        Third,
3. Arrangement in alphabetical sequence
    A. Developed within the paragraph in the general flow of the sentence; for example:
        Should it be found necessary to extend government aid to the synthetic industry in order to obtain the desired volume output, the methods chosen might be (*a*) through "capital" subsidies in the form of sale or lease of the plants or rentals based on only a fraction of their original costs; or (*b*) through continuing aids, such as tariff or other import restrictions, or direct subsidization in some form.
    B. Developed in an indented and tabular form, as:
        1. Imports of natural rubber should be maintained on the maximum scale consistent with the objectives of insuring an ample supply of rubber. . . .
        2. As a matter of national security, the government should maintain a large stockpile of rubber. . . .
        3. Some part of the existing capacity for producing bulk-use synthetic rubber should be. . . .

TABLES AND CHARTS

Communication is made quick and vivid by the proper use of tables and charts, devices of visual shorthand. Tables, charts, graphs, and pictorial representation should be included at points where they make the writer's meaning clearer than words.

The writer saves his reader time by using

1. *Maps*—to show geographical locations and distribution
2. *Charts*—to visualize a process or picture statistical data
3. *Tables*—to show at a glance the relationships between a mass of organized data.

To use visual summaries such as tables, charts, and maps properly, a writer must digest the material in his text and assimilate its significance into the general flow of his thought. Compilations of figures must not intrude into the text like an unexpected guest; they must merge smoothly into the rhythm of the writing. The reference to a table should never be perfunctory; the text should tell why the table is included. The table is then left by itself to carry forward the thought sequence. Unless tabular material can be woven into the text as an organic part of the development, it should be placed in the appendix for reference use. All of this comment is to say only that charts and tabular material for inclusion in the text must *serve a specific purpose at the exact point where they are used.* Otherwise a table or chart may interrupt the reader's forward thought movement; it causes the reader to stumble or to skip it if he follows a logical sequence of thought development.

FIVE FAULTS WHICH ADD TO READING DIFFICULTY

A reader is confused by at least five writing faults. These are

1. *punctuation used to atone for poor sentence structure*
2. *parenthetical expressions*
3. *out-of-place modifiers*
4. *absence of keywords*
5. *irrelevant words within phrases.*

1. ***Punctuation used to atone for poor sentence structure.*** The use of punctuation as a wedge to insert additional information can interrupt the reader's grasp of the main thought.

> Work, principally in the field of accounting analysis (particularly cost analysis, but comprising also analysis of import invoices, exploratory studies, and commodity classifications), has been done for the office.

The comma after *work* and the elaborate qualifying phrase set off in parentheses slow up the reading process.

2. *Parenthetical expressions.* Parenthetical expressions interrupt the flow of thought and compel the reader to regress to recover relationships and meaning. They complicate meaning because they insert an idea within an idea.

When two or more persons—whether they are male or female, related or unrelated—have the same surname (spelled identically) the surname with the least identification (fewer initials, or, perhaps, in some cases—as in famous men of ancient history—there may be only the last name) should be alphabetized ahead of the names with more identification.

3. *Out-of-place modifiers.* An out-of-place modifier makes the eyes move back and forth to locate connectional words.

The wool grown in the United States is almost wholly from Merino and crossbred sheep *ranging in quality from* 46s to 70s.

At the request principally of the Board, the Commission's New York office is carrying out an extensive program of analysis of imports, *at present covering several hundred import classifications.*

How much simpler to read:

Chiefly at the request of the Board, the Commission's New York office is presently carrying out an extensive program of analysis of several hundred import classifications.

4. *Absence of key words.* The absence of key words to guide the eye as it moves on the page costs the reader time. In the following tabulation each item begins with a series of words which communicate nothing.

a. *As to the impact of the* transition from war to peace upon rubber developments already undertaken in Latin America, the problem is perhaps not intrinsically . . .
b. *With respect to the role* which rubber may play in diversifying the economies of these countries . . .
c. *As regards the interest of the* United States in eking out, from Latin-American sources, its supplies of natural rubber pending . . .
d. *So far as concerns insuring the availability,* on a permanent basis, or substantial supplies of . . .

Passing over the fact that "as regards" and "so far as concerns insuring" are themselves suspect in the company of clear words, a good writer notes four tabulated observations all beginning with meaningless words. The key words are missing.

5. *Irrelevant words within phrases.* Extravagant use of meaningless words wastes time. Here, for example, is an 11-word line that merely shuffles its feet:

It is to be expected, however, that with further experience . . .

This passage can be written in nine words to convey meaning from the very beginning of the sentence.

With further experience, science will undoubtedly improve synthetic rubber.

Here is a 12-word line cluttered with phrases:

It should be noted that the cost problem with respect to alcohol will be seen to vary . . .

Meaning can start at the beginning of the sentence by the use of straight speech:

The cost of alcohol differs from . . .

SCHOPENHAUER ON COMPOSITION DESIGN

Schopenhauer liked to compare a writer at work on the design of his composition with an architect drawing the blueprints for a building. Before the architect sets to work, Schopenhauer observed, he

> sketches out his plan and thinks it over down to its smallest details. Nay, most people write only as though they were playing dominoes; and as in this game the pieces are arranged half by design, half by chance, so it is with the sequence and connection of their sentences. They only just have an idea of what the general shape of their work will be, and of the aim they set before themselves. Many are ignorant even of this, and write as the coral-insects build; period joins period, and the Lord knows what the author means.[10]

When a writer builds his sentences and paragraphs with the same painstaking skill which an engineer demonstrates in drafting a blueprint, a craftsmanlike composition results. The language speaks straight and talks plain.

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TRY YOUR HAND AT THESE •

- **to learn to be aware of the necessity for clear statement**
- **to strive for a readable style**
- **to develop familiarity with devices which ease the reader's visual task**
- **to stimulate a personal interest in the improvement of reading skill**

1. You are asked to prepare a staff memorandum, like the model given on page 306, proposing a simple, effective program of reading improvement. Assume that the program is to be carried out privately by each man. Recommend the work books, giving consideration to the readings suggested for this chapter.

2. An air matériel command manual contains this passage:

   (1) An employee who has a grievance or his representative will normally present the grievance, in the first instance, orally to the immediate supervisor. The supervisor will consider it promptly and impartially, collecting the necessary facts and reaching a decision. If the employee is not satisfied with the solution of the problem, he will be advised that he may discuss the problem with the next supervisor.

   (2) If the employee feels that an interview with the immediate supervisor would be unsatisfactory, he or his representative may, in the first instance, present his grievance to the next supervisor in line. When an employee feels an interview with the second supervisor would likewise be unsatisfactory, he may seek counsel from the civilian personnel officer or his employee relations counselor, whose role will be to advise and aid him in facilitating the employee's approach to a supervisory level determined appropriate by the facts in the particular case.

   Evaluate this passage by applying Herbert Spencer's principles of clear statement. Rewrite the passage. Then in a memorandum to the responsible agency explain what you did in reworking the paragraphs.

3. Refer to page 33 in Flesch's *How to Test Readability*. Compare the restatement by Flesch with your own.

4. Review your summary of the practices of the *United States News and World Report* and the discussions in this chapter. Then revise your report based on the schedule in Figure 2.6, to incorporate devices to ease the reader's visual task.

5

TABLES

IN THE REPORTER'S EQUIPMENT, SKILL IN WORKING WITH NUMBERS STANDS second only to his ability to use words. His effective use of figures in a table organizes, classifies, and condenses meaningful relationships for easy reference. The intersection of a vertical column and a horizontal row, each a definite representation, points up an important relation.

FUNCTIONAL USEFULNESS OF TABLE

In his report presentation a writer relies on a table to serve a particular purpose at a particular point in the exposition. Perhaps months of effort and hundreds of dollars have been expended in the collection of information which he organizes into a few inches of space. The facts in that table, however, clinch the point.

To deserve space in a report, a table must perform a single and sharply

focused purpose. In clarifying his purpose the writer asks himself, "*Why* do I want to say *this* to *whom*?" In the hard thinking which table planning requires, the writer asks seven more questions which enlarge on this basic formula:

A GOOD TABLE

1. has a sharply focused purpose
2. clearly explains this purpose in a title and subtitle
3. has box headings and "stubs" which are specific and unambiguous
4. arranges figures in clear-cut classifications
5. distributes totals in classes which completely contain them
6. organizes the facts so that the meanings at the intersections of horizontal rows and vertical columns have real significance
7. justifies by totals the accuracy of the component classes
8. places important totals where they can be most quickly read
9. subordinates details within major categories
10. gives the reader the briefest, most accurate, and useful information
11. fits the page or space allowed to it
12. is up-to-date and issued on time

Fig. 5.1 Qualities of a good table

1. Who will read these figures?
2. Why will such persons read these figures?
3. What do these people want to know or what does the writer want to tell them?
4. What factual relationships are significant?
5. How can the data best be grouped to tell the story?
6. What numbers are to be included in each class?
7. What classifications are generally accepted as standard?

When he has the answers to these questions, the writer is ready to design his table.

KINDS OF TABLES

Tables may be classified as statistical, accounting, and analytical. They may also be classified as "text tables" and "reference tables." The text table performs a functional role in the development of the report. The reference tables generally come in an appendix at the end of the report; there the specialist may consult and study them.

ANATOMY OF THE TABLE

A table has a skeletal structure. Each part has a function to perform within the whole pattern, as a study of Figure 5.2 will show. The table

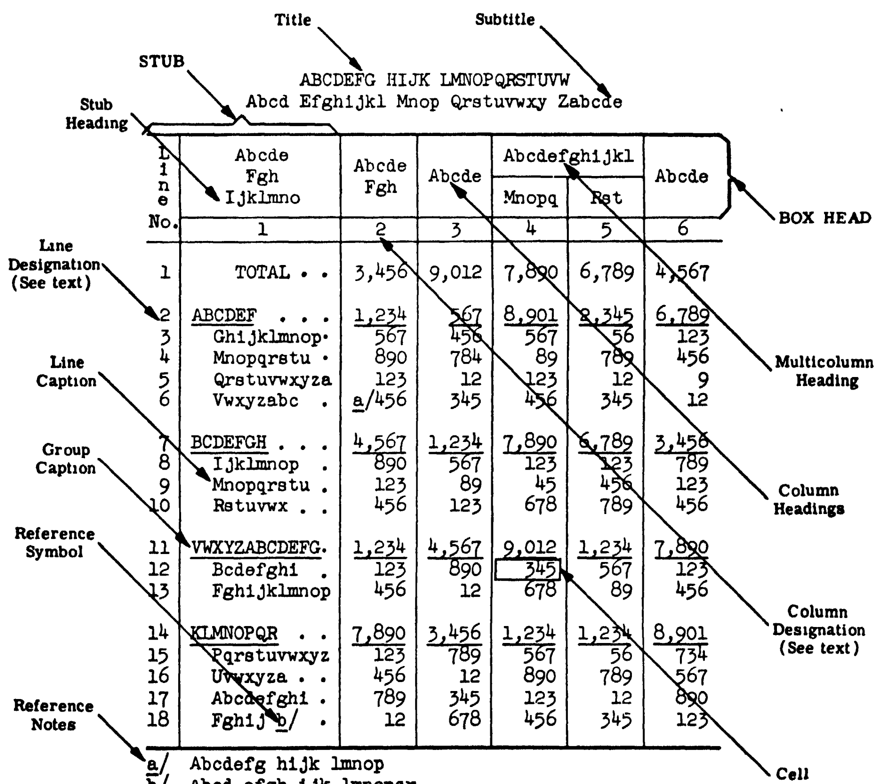
distributes data on two axes: (1) the horizontal and (2) the vertical. In table language the vertical axis is referred to as "the column." The horizontal axis is called "the row." The point at which the row intersects the column establishes the significant relationship. The *vertical stub,* usually located at the left, describes the content of the column. The *horizontal box heads,* located across the top of the table, explain the rows. When the table is properly built, the box and stub legends describe the numbers placed in the various categories. Jointly they explain every number in the table.

The technical vocabulary used in referring to the parts of a table needs brief discussion.

Table is the entire tabular presentation.

Body is the tabular part of the table without the title or footnotes.

Field describes the area lying to the right of the stub and below the box head within the body of the table where figures are entered. It does not include the stub or box head.



Line No.	Abcde Fgh Ijklmno	Abcde Fgh	Abcde	Abcdefghijkl Mnopq	Abcdefghijkl Rst	Abcde
	1	2	3	4	5	6
1	TOTAL . .	3,456	9,012	7,890	6,789	4,567
2	ABCDEF . . .	1,234	567	8,901	2,345	6,789
3	Ghijklmnop.	567	456	567	56	123
4	Mnopqrstu .	890	784	89	789	456
5	Qrstuvwxyza	123	12	123	12	9
6	Vwxyzabc .	a/456	345	456	345	12
7	BCDEFGH . . .	4,567	1,234	7,890	6,789	3,456
8	Ijklmnop .	890	567	123	123	789
9	Mnopqrstu .	123	89	45	456	123
10	Rstuvwx . .	456	123	678	789	456
11	VWXYZABCDEFG.	1,234	4,567	9,012	1,234	7,890
12	Bcdefghi .	123	890	345	567	123
13	Fghijklmnop	456	12	678	89	456
14	KLMNOPQR . .	7,890	3,456	1,234	1,234	8,901
15	Pqrstuvwxyz	123	789	567	56	734
16	Uvwxyza . .	456	12	890	789	567
17	Abcdefghi .	789	345	123	12	890
18	Fghij b/ .	12	678	456	345	123

Courtesy Adjutant General, U.S. Army

Fig. 5.2.

Title is the brief but accurate description of the content of the table worded in topical, not sentence, form. It should begin with the most significant key word.

Stub is the vertical column at the side of the table. It contains the captions indicating what kind of data is entered in the horizontal lines of the field. Usually it is located on the left side of the table. In two-page tables, however, a duplicate stub may be put on the right side, as well, to make reference easy.

Box head refers to all the column headings across the top of a table. These headings indicate the kinds of information to be entered in the vertical columns of the field below.

Footnote presents supplementary information necessary for the interpretation of the table.

CLASSIFICATION

The gathering of the information which goes into the content of a table requires statistical research experience. This section deals only with the presentation of the data. Early in the planning of the whole report, careful thought must be given to the use and preparation of tables. There must be a good reason for including every column and row. Hence, the writer must

1. determine the purpose of the table
2. decide on kinds of information he wants collected
3. develop the schedules for collecting it
4. design a preliminary working table
5. describe the table in a brief and carefully worded title
6. elaborate the title in a subtitle, if necessary
7. spell out the classifications into which he is going to put his numbers
8. sort his data into an array; if appropriate, group it by frequency distributions and process it to the degree of refinement necessary
9. add up the numbers in the various classifications as he has marked them down on his tally sheets
10. draw up the final table for inclusion in the report

In designing the preliminary table, the writer sits down with his ruler, pencil, and worksheet and thinks of the relationships he wants to describe at the intersection points of the vertical columns and horizontal rows in his table. He defines his categories in concise statements and plays with his data until he can locate all the numbers in appropriate pigeonholes. As he proceeds, the writer will bump into cases which do not fit into the classifications as he has defined them. At this point he needs to review his stub and box headings until he has classifications into which *all* the indi-

vidual items can be fitted and generalized. All figures must have cells to fall into.

An advertising magazine wants to determine how many subscribers are executives who make decisions about the appropriation of advertising funds. The reporter drafts a tally worksheet schedule like this:

Position	Number of Subscribers		Head Office	%
TOTAL				
President	~~IIII~~ III		~~IIII~~ III	
Vice-President	~~IIII~~ ~~IIII~~		IIII	
Media Executive	~~IIII~~ IIII			
Account Executive	~~IIII~~ ~~IIII~~		~~IIII~~ I	
Non-Agency Subscriber	~~IIII~~ ~~IIII~~ ~~IIII~~ III		~~IIII~~ ~~IIII~~ I	

STANDARD TABULAR STYLE

When all the preliminary work has been done, the writer is ready to prepare the final draft of the table. The make-up of a typewritten table has been pretty well standardized according to the following specifications:

1. Center the title above the table. Type all letters in capitals and do not underline. Center the subtitle and capitalize important words.

Center title; all caps → TABLE 6. ARRESTS BY SEX

25 Most Frequently Committed Crimes ← **Center subtitle; capitalize important words**

Offense Charges	Total	Number Male	Female	Total	Per Cent Male	Per Cent Female
Total	793,871	717,088	76,683	100.0	100.0	100.0
	......	......	.....	.....	.....	.....
Criminal Homicide	6,336	5,482	854	.8	.8	1.1
Drunkenness......	178,165	162,202	15,963	22.6	22.8	20.9

Technical Service and Major Group	Estimated Value in Thousands of Dollars							Percent of Total			
				Ready for Issue					Obligated For		
					Obligated For						
	Total in Storage	Under Repair	Awaiting Final Assembly	Unobligated	Issue to Army	Operational Reserve	Int. Aid and Navy	Unobligated	Issue to Army	Operational Reserve	Int. Aid and Navy
TOTAL	1,234,567	890,123	45,678	9,012,345	678,901	234,567	89,012	34.5	67 8	90.1	2.3
ORDNANCE DEPARTMENT	4,567,890	123,456	78,901	2,345,678	901,234	456,789	12,345	67.8	90.1	23.4	5.6
Small Arms	789,012	34,567	8,901	23,456	78,901	23,456	78,901	23.4	56.7	89.0	1.2
Artillery	345,678	90,123	4,567	890,123	45,678	90,123	4,567	89.0	12.3	45 6	7.8
Tanks	901,234	56,789	1,234	56,789	12,345	67,890	1,234	56.7	89.0	12.3	4 5
Self-Propelled Weapons . . .	678,901	23,456	7,890	123,456	78,901	23,456	7,890	12.3	45.6	78.9	1.2
Combat Cars and Carriers . .	34,567	89,123	4,567	890,123	45,678	90,123	4,567	89.0	12.3	45.6	7.8

Courtesy Adjutant General, U.S. Army

Fig. 5.3. Example of varied rulings

2. Capitalize stub captions as titles. Put major group captions in the stub in capitals and underline. Put subcaptions in initial caps.
3. Capitalize important words in column headings and center vertically and horizontally in the space available. Because the centering of typed material often does not correspond to the mechanical spacing of a

MOTION PICTURE PRODUCTION SUMMARY

Type of Film	Approved for Release	
	This Year	
	Number	Per Cent of Total
TOTAL PICTURES	123	100.0
FOREIGN LANGUAGE FILMS	123	53.6
Spanish	901	23.3
Portuguese	678	16.2
Chinese	456	12.1
French	12 a/	2.0
MISCELLANEOUS	678	16.1
Film bulletins	34	5.0
Special Projects	89	4.1
Industrial Services ...	12 b/	1.5

a/ Footnote

b/ Footnote

Stub caption important words capitalized

Column headings capitalized as titles

Center horizontally

Center vertically and horizontally

Major group caption caps

Subcaption initial caps

Leaders

typewriter, the operation requires careful manipulation by the typist unless the machine is equipped to half-space both horizontally and vertically.

4. Extend the captions in the stub to within a space of the first vertical ruling by leaders (. . . . .) made by periods typed in every other space. Be sure that the leaders line up vertically.
5. Use the asterisk (*) for a reference symbol when there is only one reference. Where references exceed one, use a sequence of lower-case letters set off from the context by an underscore and diagonal: a/. Place the reference symbol at the point of reference, with a spacing on either side. Generally locate the symbol to the right of the point of reference. Place an identical symbol before the note explaining the reference.
6. Place units of measurement in the box head of the table.
7. Set off each three digits in a figure by a comma.
8. Enter zeros to indicate none, but show absence of data by dashes or a reference symbol in the appropriate cell.

9. Place a dollar sign ($) before the first item in the column of figures and before totals, but omit the sign from other entries when all the figures entered in the column refer to sums of money.
10. Locate totals in positions where they will be seen first. Such positions of preference are generally the first line of the table running immediately under the box and the first column running immediately against the stub designations.

STANDARD SPACING

In typing tables in his manuscript, a writer will find the following suggestions helpful.

1. Type a subtitle immediately beneath the title, without leaving a blank line.
2. Separate the column headings from the title or subtitle by one blank space.
3. Allow one blank space between the column headings and the first caption in the stub.
4. Space the stub as follows:
   a. Place totals above the items of which they are the aggregate, type TOTAL in capitals, and indent four spaces, except in accounting reports where accounting style must be followed.
   b. Allow one blank line between major group caption and subcaption. Indent subcaptions two spaces more than group captions.
   c. Where subcaptions are longer than the major captions, indent the major caption two spaces, and make the subcaption flush with the left margin of the table.
5. Allow a blank line between total and group captions.
6. Underline group captions where space is at a premium, and omit the blank space.
7. Place a total column to the left of the columns of which it is the aggregate in the box head, except in accounting reports where accounting style must be followed.
8. Locate derived figures such as averages, ratios, and percentages in the column at the right of base figures.
9. Leave two spaces between text, tables, and charts.

INGENUITY IN TYPING TABLES

The actual typing of the table requires a good deal of ingenuity. A few suggestions for the typist should be helpful.

1. Type or count the number of characters and spaces needed for the

longest caption in the stub and the largest figure in each column, exclusive of the headings. Allow at least two spaces between columns.
2. Revise the width of the coordinate columns to make them all equal to the widest; then retype the material in this arrangement.
3. Allocate additional spaces where they will be most useful to bring width up to standard. Increase the width of related columns uniformly and place remaining extra spaces in the stub.
4. Fit column headings to the space available. Like the newspaper headline writer, the report writer may be compelled to try a number of different word and space arrangements before he works out a satisfactory pattern.
5. Save space by grouping related columns and placing words common to each in over-all headings. Center multicolumn headings in a double space above column headings. To save space, the writer can also hyphenate a word with two or more syllables, locate it on two or more lines, and use standard abbreviations.

TABLE RULING

In drafting tables and in trial typing, the writer makes his rulings in pencil. When he is ready to make the final draft, however, he or his draftsman uses a ruling pen and black ink to make the proper lines. A table requires two weights of line: (1) a heavy ruling, and (2) a light ruling. The heavy horizontal rulings are drawn the full width of the table immediately above the column headings and also below the field, leaving one blank space below the last line of the stub. All other rulings are light. Light vertical rulings are drawn between adjacent columns including the stub and first column, but not at the sides of the table. Rulings horizontally across the field are not necessary although they are sometimes used in the field of a table in which many of the cells must be left blank. In this case, rulings after about every fifth line are needed to guide the eye from the line captions to the appropriate data.

SMALL TABLE IN TEXT

Where tabular material is too limited to justify presentation in a table, it can be run into the text without title or rulings. The material should begin the second space below the preceding text and be centered horizontally. Subsequent text should begin on the second line below the last line of the table.

Year	*Lowest Price*
1925	35.0
1926	36.0
1927	33.0
1928	16.5

LOCATION OF TEXT BETWEEN TABLE AND CHART

When a page contains table, text, and chart, some of the text should be placed between chart and table. Under this arrangement, the table goes either at the top or bottom of the page, depending on whether the table introduces the chart or merely supports it. When the chart and table are not related, the natural sequence of the discussion determines their placement.

SUPPORT OF FIGURES WITH VIVID NARRATIVE

Skillful interpretation through vivid narrative should be used to introduce figures into the text. One way of achieving effectiveness lies in reducing the numbers to some units which the reader can easily comprehend. One writer makes the lifeless figures in a table live by expressing them in this way:

> Every 5 minutes during last year someone in the United States was feloniously assaulted or killed. During each average day 146 persons were robbed and the cars of 468 others were stolen. With the passing of each day 1,129 places were entered by burglars; and in addition, every 30 seconds on the average throughout the year, a larceny was recorded. The total volume of crime last year was up 1.5 per cent across the nation.

USE OF TABLES TO EMPHASIZE HIGHLIGHTS

Tables often emphasize highlights in a presentation which, if expressed in a straight prose paragraph, could easily be missed by the reader. Figures 5.4 and 5.5 compare the effectiveness of a budget justification when

---

The lastest available figures published by the Department of Labor, Bureau of Labor Statistics, indicate an over-all commodity price increase of approximately 22 per cent in a year. That report indicated an advance of 40 per cent for foods, 28.6 per cent in farm products, approximately 16 per cent in textile products, 13 per cent in fuel and lighting materials, 12.6 per cent in building materials, 20.4 per cent in manufactured products, and approximately 7 per cent in miscellaneous commodities. The increases in commodity prices, as indicated by the Department of Labor, were applied to the types and percentages of the various commodities used in connection with "Care of Inmates" classification of expenses; for example, expenditures approximate 51 per cent for food, 17.4 per cent for clothing, 13 per cent for farming operations, and 18.6 per cent for all other items. The application of the percentages of increases in commodity prices to the percentage of actual utilization amount in the over-all aggregate to $812,490, representing an increase in the per capita rate from 56.1¢ per man per day, to an estimated per capita rate of 72¢ for the fiscal year.

The item "Care of Inmates," therefore, is computed on the basis of an estimated average population of 14,000 inmates at a daily per capita of 72¢, a total of $3,689,280, which is $822,570 more than provided in the appropriation. Of that amount, $812,490 is due to commodity price increases and $10,080 for the one additional day in 1948, which is a leap year.

Fig. 5.4. Narrative budget justification

the figures are hidden in the narrative and when they are raised to a high level of visibility by organization in tables.

The item "Care of Inmates" is estimated at $3,689,280. This is computed on an average population of 14,000 at a daily per capita cost of 72¢. The increase over the previous appropriation is due to:

Increase in commodity prices	$812,490
Additional day (leap year)	10,080
Total increase over previous appropriation	$822,570

The daily per capita cost reflected in the previous appropriation is 56.1¢. For the current year it is estimated to be 72¢, made up as follows:

COMMODITY	Average daily per capita cost in cents (last year)	Increase this year over last year (cents)
Food	28.6	11.4
Clothing	9.8	1.8
Farm operations	7.3	1.1
All other	10.4	1.5
Total	56.1	15.9

The estimates of increase in the four commodity groups are based upon the commodity price index data of the Bureau of Labor Statistics, as follows:

B. L. S. COMMODITY GROUP	Increase this year over last year (per cent)	Est. percentage increase applied to our cost components
Food	40.0	40.0
Textile products	16.0	18.2
Mfgd. products	20.4	
Farm products	28.6	
Fuel & ltg. mater.	13.0	15.3
Building materials	12.6	
Miscellaneous	7.0	

Fig. 5.5. Tabular budget justification

Officers	Position	Salary payments	Thrift account payments	Total remuneration	Payments toward annuity purchases
Eugene Holman	Director and President	$170,000	$16,013	$186,013	$23,905
F. W. Abrams	Director and Chairman of Board	145,000	13,638	158,638	26,801
Orville Harden	Director and Vice-President	124,782	11,900	136,682	18,375
John R. Siman	Director and Vice-President	107,500	9,994	117,494	18,870

Fig. 5.6. Tabular presentation to visualize facts

TABULAR SUMMARIES

Tabular form is often used merely to visualize facts for quick reading. Such tables and diagrams are not properly statistical tables, but serve as a convenient device for clear presentation. By careful analysis and concise statement, an enormous amount of information can be given clearly in a small space. In the table given as Figure 5.6, a firm of certified public accountants analyzed the incomes of some top officers of a Standard Oil Company. To draft this table, the accountants had to conduct extensive research into documents, minutes, and resolutions. In the convenient reference table shown as Figure 5.7, a broadcasting analyst has boiled down the facts which relate to the measurement of radio audiences.

RADIO AUDIENCE MEASUREMENT METHODS

TECHNIQUE	METHOD OF DATA COLLECTION	AUDIENCE CHARACTERISTICS MEASURED	ADAPTABILITY TO COMMUNITY STATION USE
1. Coincidental "Hooper"	Telephone Personal Interview	1. Percentage of radios on 2. Program listening 3. Sponsor identification 4. Composition of listener family	1. Telephone method requires battery of trained operators skilled in securing and recording answers 2. Similar difficulty in personal interview 3. Doesn't give enough information about programs unless used regularly 4. Usually doesn't give socio-economic facts about audience
2 Diary Panel	Controlled mail distribution and collection by Personal interviewer. Facts recorded by listener family. Used by American Research Bureau	1. Program listening by individual and family 2. Total audience and average audience 3. Program listening and commodity purchase relationship 4. Socio-economic characteristics of program and station audience	1. Expensive for single program, but cheaper than other methods for a complete description of station listening 2. Difficult to tabulate meaningfully, but very useful if properly executed
3 Audimeter "Nielsen"	Interviewer distributes and collects tapes, makes audit of garages, basement and pantry shelves	1 Radio set tuning over a period of time 2. Buying habits correlated with radio tuning 3. Type of audience flow 4. Socio-economic characteristics of audience	(Can be purchased only from A. C. Neilsen Co.) 1. Does not measure opinions or individual listening 2. Sample criticized because of design and failure to parallel signal strength
4 Unaided Recall	Telephone Personal interview Controlled mail	1. Same as coincidental, but involves listeners' ability to remember 2. Used for station audience coverage	1 Tendency to underrate small station audience size 2. Useful if individual program listening not measured 3 Requires memory 4. Should not be used if other method available
5 Aided Recall "Pulse"	Personal interview roster Controlled mail	1. Number listening any time within recall period in telephone and non-telephone homes 2. Number listening to any station, telephone	1. Overestimates popular program, new or small audience programs 2. Small station likely to understate its audience on any particular day
6 Program Analyzer	Studio audience presses buttons controlling pens attached to a moving tape	1. Audience likes, dislikes and indifference, minute by minute in listening to studio-produced programs	1 Not easily available 2. Useful chiefly for network program building
7 Listener Jury	Controlled mail or personal interview	1 Audience likes, dislikes and indifference, a. individual performers b program situations c continuity d. commercial messages 2. Audience opinions regarding mechanical considerations a. signal strength b. broadcast hours c. program sequence 3. Audience opinions regarding service policy, news policy, etc	1. Must secure cooperation in advance of program 2. May be difficult to maintain balanced sample of listener types 3. Listeners may react as "experts" 4. Easy for community station to use if cooperation can be secured 5. Yields much information of immediate value in enough time available for preselecting the sample and organizing necessary material
8. Listener Opinion Poll	Personal interview Controlled mail	1. Listener opinons of programs and talent 2. Listener suggestions for changes in policies and programming 3. Socio-economic characteristics of station audience	1. Easy to plan, conduct, tabulate, but may be difficult to interpret 2. Requires skill in questionnaire development and application of findings 3. Inexpensive and useful when properly done
9. Signal Strength Tests	Engineers use field strength measuring equipment	1. Determines intensity of station's signal at selected locations (0 5 millivolt per meter is considered satisfactory by F.C.C. for primary coverage)	1. A preliminary step before selecting sample within primary coverage area in any other method 2. Tells where station can be clearly heard but not who listens or when they listen

George Fisk, "Defining and Measuring Radio Audiences," ECONOMIC AND BUSINESS STUDIES, *Bulletin No. 10, Part II, State College of Washington*

Fig. 5.7. Tabular Analysis

READINGS

BUTSCH, R. L. D., *How to Read Statistics.* Milwaukee: Bruce Publishing Company, 1946.

DORIS, LILLIAN and BESSE MAY MILLER, *Complete Secretary's Handbook.* Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1951. Chapter 4; especially, "*How to Type a Table.*"

HUFF, DARRELL, *How to Lie with Statistics.* New York: W. W. Norton & Company, Inc., 1954.

JENKINSON, BRUCE, *Bureau of Census Manual of Tabular Presentation.* Washington: Government Printing Office, 1949.

ZABLEY, JOHN H., JR., *The Preparation of Accountants Reports.* New York: American Institute of Accountants, 1945.

TRY YOUR HAND AT THESE •

- **to acquaint yourself with the structure of the table**
- **to simplify communication in reports**
- **to practice constructing and using tabular matter**

1. Write a memorandum describing how tables have been used in at least three report situations to simplify communication. Illustrate your points by clipping the tables and including them in your report.
2. Develop a table to show the average comparative incomes of a half dozen vocations, including the one which you are studying for your career, long-form report.
3. Using the technical terms which identify the component parts of a table, write a letter of instructions to a research associate. Explain to him the reason why you want the table and what relationships it should show. Attach a dummy of the proposed table.
4. A United Nations agency employs a staff of 306 people. You wish to classify the nationality of this staff according to these broad geographic areas: British Commonwealth, United States, American Republics exclusive of the United States, Europe, Asia, Africa, and the Middle East. The data are as follows: Australia, 16; Belgium, 4; Canada, 22; Cuba, 1; Denmark, 20; France, 11; Greece, 3; Haiti, 1; India, 1; Ireland, 1; Iraq, 1; Italy, 1; Lebanon, 1; Mexico, 1; Netherlands, 9; New Zealand, 5; Norway, 9; Peru, 4; Philippines, 1; Portugal, 1; Stateless, 3; Sweden, 5; Switzerland, 4; Syria, 1; Thailand, 2, Union of South Africa, 2; United Kingdom, 74; United States, 102. In building the table, give numbers and percentages.
5. From data in the *World Almanac,* prepare a table to show the relationships in ten private universities between number of students enrolled, the number of faculty members, and the amount of endowment. Show the ratio of faculty to students and the amount of endowment per enrolled student.

6

CHARTS

FOR CENTURIES, CHARTS HAVE BEEN USED BY SAILORS TO GUIDE THEM IN navigating the seas. The marine map helps the captain to locate the position of his ship in relation to land or dangers to be avoided. It indicates the distance to be sailed and the direction of his course. It presents facts *in relationship* so that the eye can grasp them quickly. It communicates information on which the safety of the ship depends. When a writer thinks of his chart in terms of this background, he gets a clear picture of how to use a graph in a report.

By the location of spots on a diagram, a chart brings to sharp visual focus a system of interrelationships which have decisive meaning.

EFFECTIVE USE OF CHARTS

A writer uses a chart in his report when, in lieu of words, the visualization will tell the story (1) more fully, (2) more clearly, (3) in less time, and

(4) in less space. A chart must add clarity and economy to communication. It serves its purpose, as Figure 6.1 indicates, when it leaves the reader with a coherent, unified, and usable image.

A GOOD CHART

1. is clear in purpose
2. explains itself in a concise, yet fully descriptive, title
3. directs its message to clearly identified reading publics
4. adapts the tone and idiom of presentation to the reading publics for whom it is designed
5. meets the audience on its own level of interest
6. moves forward the thought of the report, acting as an organic link in the development of the whole presentation
7. thoroughly works through the characteristics of the data presented
8. makes a clear visual statement of a complex subject
9. clarifies and emphasizes decisive relationships in the information presented
10. leaves the reader with a coherent, unified, and usable image

Fig. 6.1

ANATOMY OF THE CHART

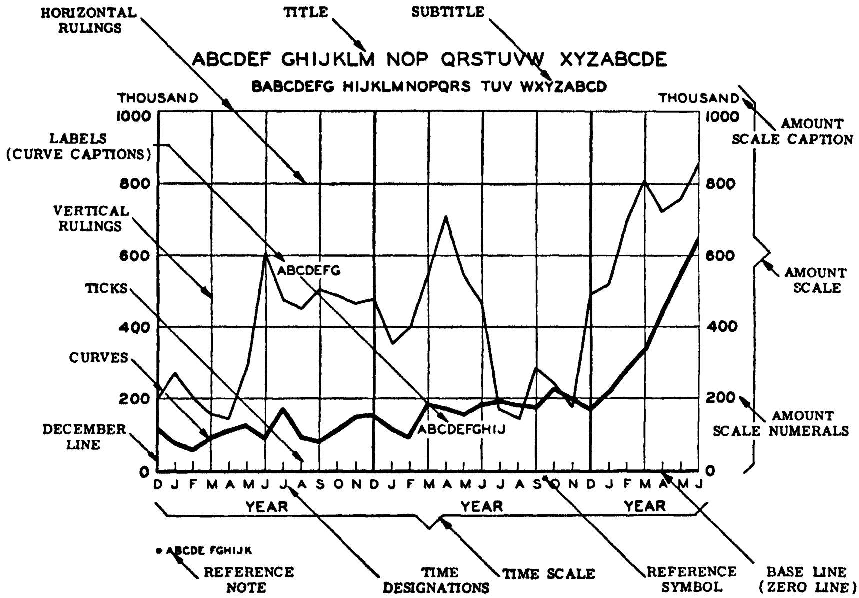
Like the table, the chart has a definite structural form. The skeleton consists of vertical and horizontal rulings. The various parts have technical names, which are shown in Figure 6.2.[1]

DESIGN OF THE GRAPH

When a writer decides that a chart will help him in making clearer statement, he sits down with his pencil to block out the design of the ideas he wants to communicate. He jots down a title and subtitle in headline style. The title of the chart is important because it catches the reader's eye first. It ties into the onward flow of the presentation in the text.

What size shall the chart be? This is the writer's next question. His answer depends upon the amount of space he allocates to the chart in the report dummy. Charts reproduce best when they are drafted to 150 per cent of their final reproduced dimensions, so that publication results in a reduction of one third. By being explicit in describing what kind of a chart

[1] Illustrations and much basic text describing chart types are reproduced by the permission of the Adjutant General. This important material was prepared under the direction of the late John D. Witten, World War II colonel, GSC, chief statistician, Armed Service Forces and issued for in-service instruction under the title *Standards of Presentation* by the Statistics and Progress Branch, Control Division, Headquarters, Army Service Forces, War Department.



Courtesy Adjutant General, U S Army

Fig. 6.2. Anatomy of a chart

he wants, what purpose it is to serve, and what statistical material it is to visualize, the writer makes the draftsman his partner in presentation. Figure 6.3 presents a form for preparing instructions to the draftsman. Generally this draftsman will be the writer himself!

INSTRUCTIONS TO CHART DRAFTSMAN

1. Brief description of what the chart must show in the context of the report:
2. Title of chart:
3. How the chart will be used:
4. Where the chart will be used:
5. Size of the chart (state exact measurements, so that draftsman's work will meet space requirements):
6. When the chart is needed:
   (Time schedule against which the draftsman must work)
7. Important relationships to be stressed in the chart:
8. Detailed description of the chart as the writer visualizes it, together with rough draft:
9. Statistical table from which the draftsman is to construct the chart:
10. Special suggestions:

Fig. 6.3

CHOICE OF CHART BEST FITTED TO VISUALIZE IDEA

For every relationship which the writer needs to visualize in his report, some one particular form of chart exists best to communicate the idea. The choice of that one most appropriate graph can be made from many available types. The following pages discuss the structure and functions of a number of standard chart forms. By mastering these fundamental forms and by an ingenious adaptation of them to his needs and audience, the writer with his draftsman can give to his visual aids incorporated into his report presentation the same high tone and quality which characterize his manuscript.

TYPES OF CHARTS

Standard charts fall into five general classifications:

Curve charts join the plotted points of a series of data and form a continuous line or curve

Surface charts represent numerical values by the vertical dimensions of a surface

Column charts represent numerical values by the height of a vertical bar

Bar charts represent numerical values by the length of horizontal bars

Combination charts provide wide latitude for invention to provide clear statement

CURVE CHARTS

A curve chart (Figure 6.4) is the most common form of graph to show series data. It is an effective means of comparing two or more series, permitting the visual comparison of a large number of plotted values in a compact space. When there are few plotted values in the series or when the movement of the data is violent or irregular, the curve chart is not usually the best format in which to present the figures.

A multiple-curve chart (Figure 6.5) brings together two or more related curves for purposes of comparison. These curves may be independent of each other or may be interdependent, as a total and its components. In either case, the number of curves compared should generally be limited to a few. If more than two or three crossing curves must be shown, they can usually be shown more effectively in two charts than in one.

A cumulative-curve (Figure 6 6) presents data such as the accumulated totals of deliveries of equipment. This gathering process tends to smooth fluctuations and is particularly appropriate when the primary interest is

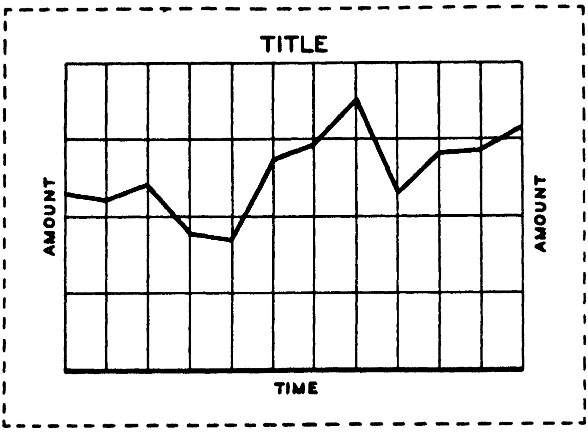


Fig. 6.4. Simple curve chart

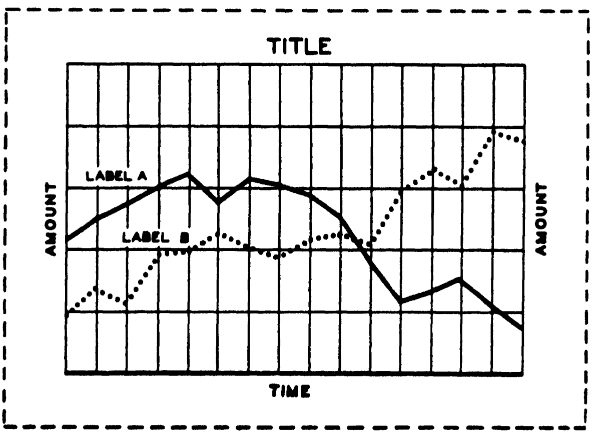


Fig. 6.5. Multiple curve chart

in over-all results for an extended period. By this type of chart a writer can compare results "so far this year" with those for the "same period last year" or with an annual objective or goal.

A staircase chart (Figure 6.7) provides an alternate method of connecting the plotted points of a series. It is an intermediate between the sloping curve chart and the column chart. Staircase curves are particularly suitable for presenting data in which the periods are of irregular length or changes in amounts are abrupt, and for showing averages during periods, with relation to data for points of time. They are seldom suitable for presenting more than one series of data if the curves cross.

A supplementary scale chart (Figure 6.8) provides another method of bringing two series together for purposes of comparison. In this type of

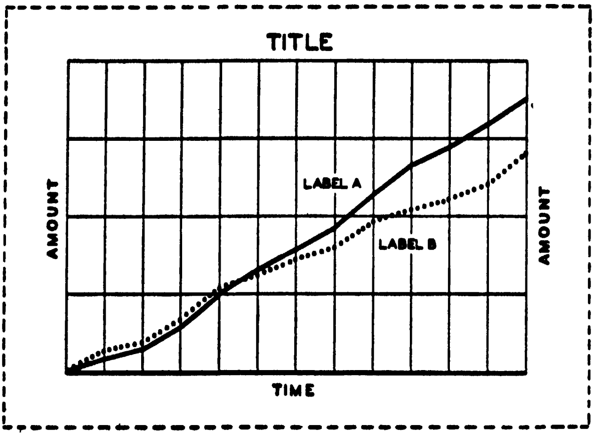


Fig. 6.6. Cumulative-curve chart

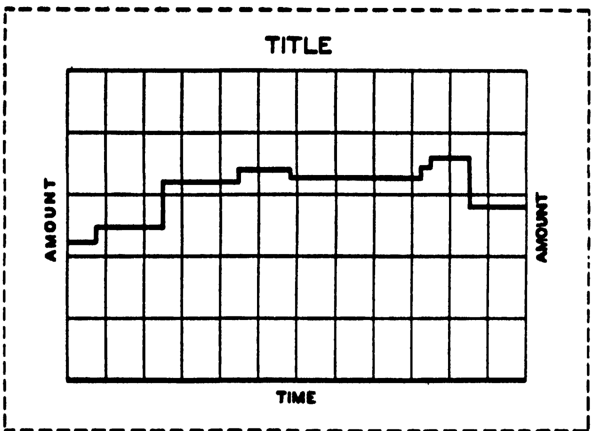


Fig. 6.7. Staircase chart

chart, "supplementary" scales, consisting of certain ratios based on the primary series, are employed. For example, instead of using two absolute amount curves to compare the number of officers with the total military strength, a curve representing the officer strength might be shown against supplementary curves representing 6, 7, and 8 per cent of total strength.

A logarithmic scale chart (Figure 6.9) can be used effectively in certain situations. If a logarithmic amount scale is used in place of the usual arithmetic amount scale, the resulting chart presents a picture of *rate* of change instead of *amount* of change. This type of chart should be used with caution because it may be misunderstood by persons not familiar with it. A safe procedure is to use logarithmic charts in conjunction with arithmetic charts that show the same data.

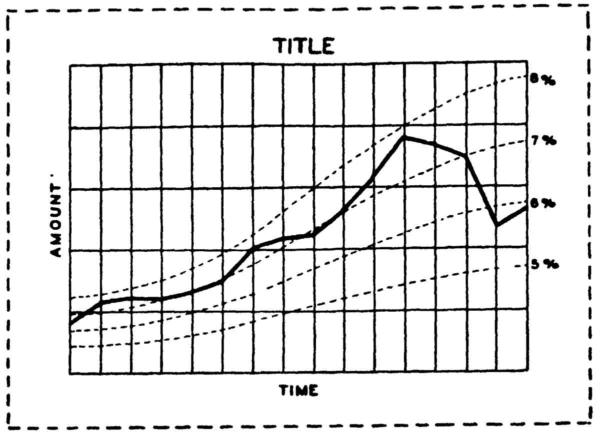


Fig. 6.8. Supplementary scale chart

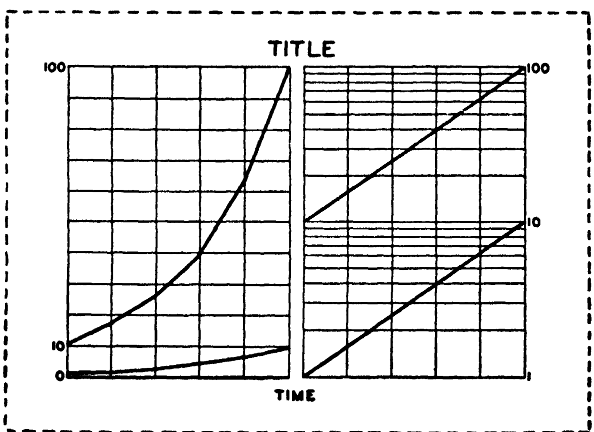


Fig. 6.9. Arithmetic and logarithmic scales chart

SURFACE CHARTS

Simple surface charts serve principally to emphasize magnitude with relation to movement. When subdivided, the surfaces in this type of chart, as Figure 6.10 indicates, effectively show components of totals and especially percentages of totals. A writer should not confuse a surface chart with an area chart or use a surface chart (1) when accurate reading of values is desired for more than one component, (2) when an irregular layer will unduly distort the contour of others above it, or (3) when changes within the series are abrupt enough to cause optical distortion of the strata.

A simple surface chart (Figure 6.10) is merely a single curve on which the space between the curve and base line has been shaded to form a surface. This manner of presentation emphasizes the magnitude of total amounts rather than the differences or changes in amounts. The zero should always appear on such a chart because its omission distorts the picture and may give an entirely false impression of changes in total amounts.

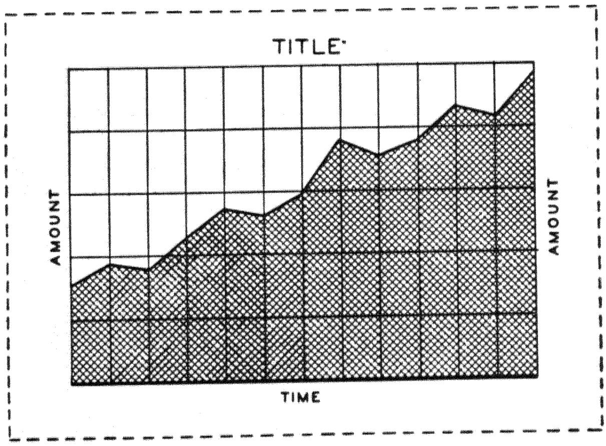


Fig. 6.10. Simple surface chart

A staircase surface chart (Figure 6.11) is similar to a simple surface chart except that it employs a staircase instead of a slope curve. This type of chart is almost the same in appearance as the connected column chart illustrated in Figure 6.15 but is somewhat different in use. The staircase

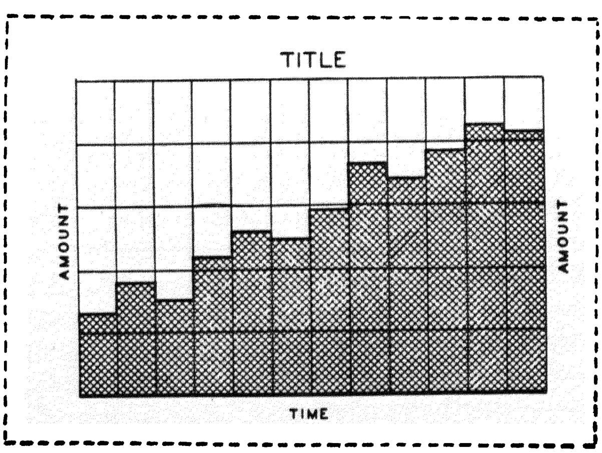


Fig. 6.11. Staircase surface chart

treatment is more appropriate for data which have a continuous flow or carry-over. The column presentation is appropriate for data in which there is no carry-over.

A subdivided surface chart (Figure 6.12) is a drawing in which the values of a number of component series are represented by the height of surfaces or layers placed one on top of the other. This type of chart is also known as the *strata chart* or a *multiple surface chart.* Strata charts are sel-

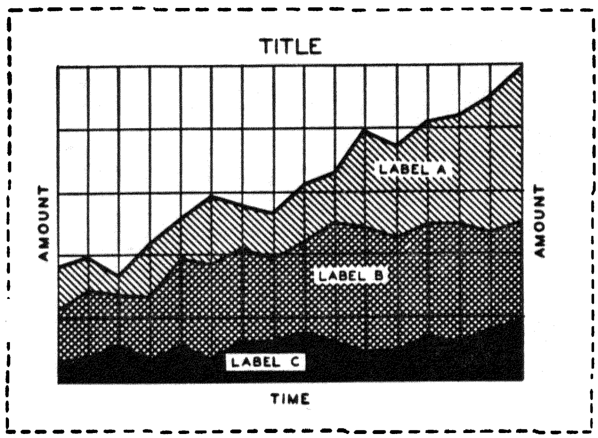


Fig. 6.12. Subdivided surface chart

dom effective when one of the components fluctuates sharply. Unless the erratic layer can logically be placed at the top, a subdivided column chart (Figure 6.17) should be used.

The 100 per cent surface chart (Figure 6.13) is a subdivided surface

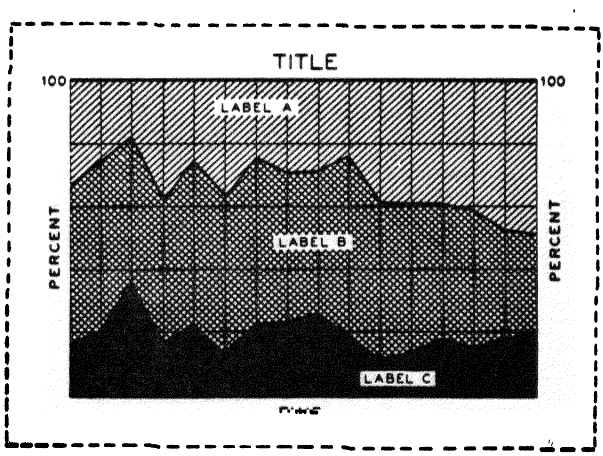


Fig. 6.13. 100 per cent surface chart

chart in which the total of all strata is 100 per cent. This type of chart covers a period of time during which components vary in their proportion to the whole. The use of a 100 per cent strata chart in conjunction with a strata chart showing absolute amounts may often be desirable to show two aspects of the same fundamental data.

COLUMN CHARTS

Column charts are useful for presenting data built up from zero for each period shown. When continuous data, in which there are carry-overs through successive dates, are dealt with, however, the surface charts are a more effective method of visualization.

The column chart is not a *bar* chart. It is used to compare data for a given item at different times. *The bar chart compares data for different items at the same time.* Although it is easy to understand, the column chart is relatively difficult to design effectively. A report writer uses column charts to good advantage to (1) emphasize total magnitudes in a single series of data, (2) show a few components of totals, and (3) show a range of values or deviations from a normal or standard. Column charts are *not* the best form to (1) compare several series of data, (2) show a large number of plottings, or (3) show numerous components of totals.

A simple column chart (Figure 6.14) consists of a series of columns drawn from a common base line. This style of chart is particularly effective for showing growth or development because it presents a stronger picture than a curve showing the same data. As in the case of the surface chart, the zero line should never be omitted from a column chart. The columns should not be broken, except to show an occasional "freak" value.

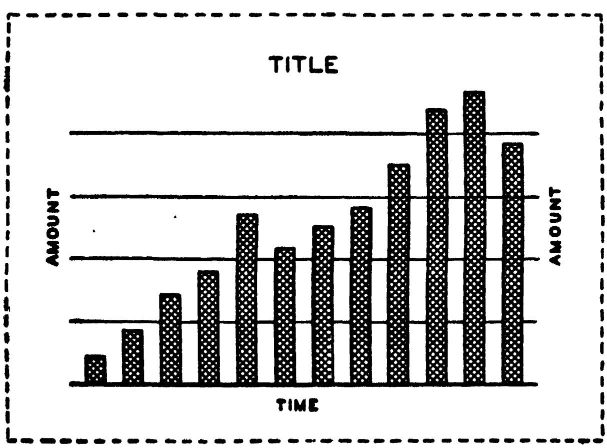


Fig. 6.14. Simple column chart

A connected column chart (Figure 6.15) omits the space between columns. Sometimes spoken of as a "contiguous column chart," it closely resembles the staircase surface chart shown in Figure 6.11. Connected columns are used when there are so many columns that they cannot otherwise be shown wide enough to be effective.

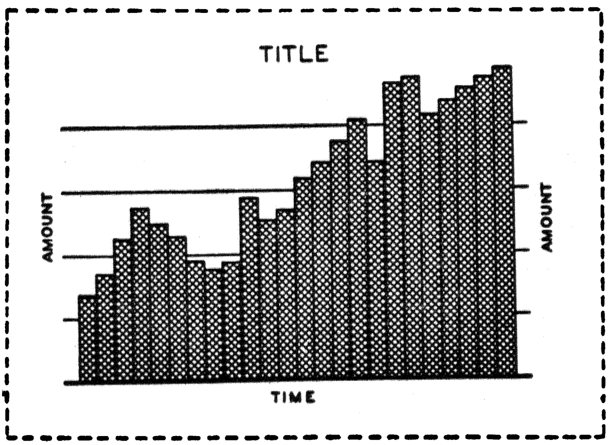


Fig. 6.15. Connected column chart

A grouped column chart (Figure 6.16) is a variation sometimes suitable for comparing two, but rarely more, independent numerical series. This chart is most effective when used for a series that differs materially in size or in trend. To emphasize the group arrangement, the horizontal spacing between groups should be no less than the width of one column.

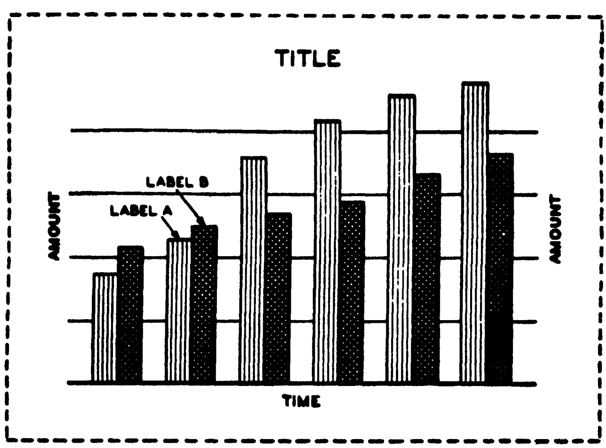


Fig. 6.16. Grouped column chart

A subdivided column chart (Figure 6.17) depicts component parts by varying the height of segments of the columns. Such a chart is also known as a "segmented column" or "composite column" chart. In purpose it is similar to the subdivided surface chart (Figure 6.12), but it more effectively shows sharply fluctuating values. In using this type of chart there is a tendency to show too many components, making individual parts difficult to identify and compare. For effective presentation, the number of components should be small, and each segment should be set off by a distinctive shading.

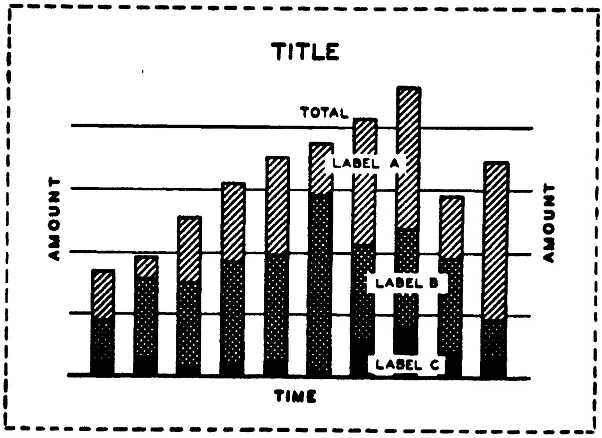


Fig. 6.17. Subdivided column chart

The net deviation column chart (Figure 6.18) is one of the forms of deviation column charts which provide space below the zero line to plot

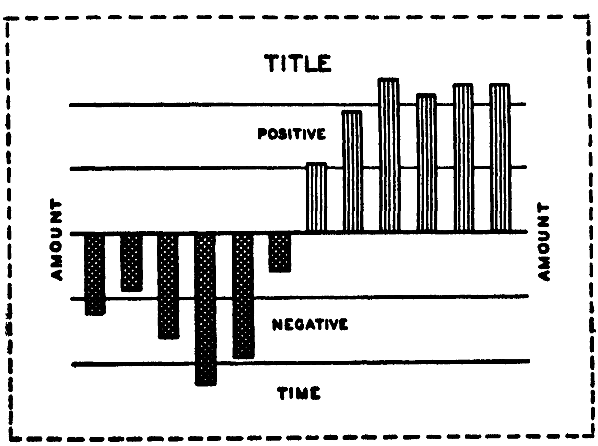


Fig. 6.18. Net deviation column chart

negative values downward as well as space above the zero line for plotting positive values. The net deviation column chart is especially useful in showing variations from an estimate or requirement. A column can extend either above or below the base, but not both.

The gross deviation column chart (Figure 6.19) provides a device for comparing net results directly with the gross figures from which they are

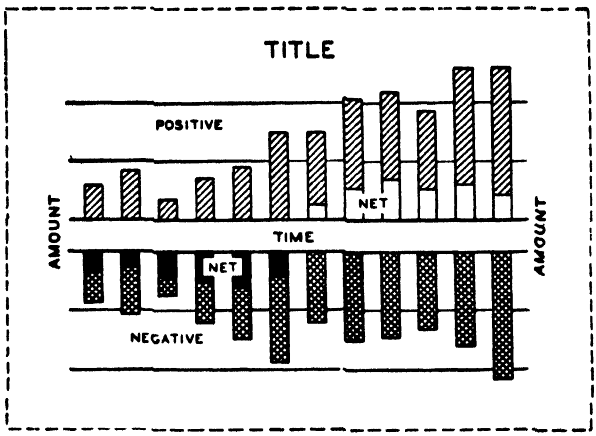


Fig. 6.19. Gross deviation column chart

derived. Columns extending up from a base line, for example, might represent data such as receipts, and those extending downward might represent shipments. The difference between the lengths of these columns is the "net" which appears as a segment of the longer column, either above or below the zero line as the case may be.

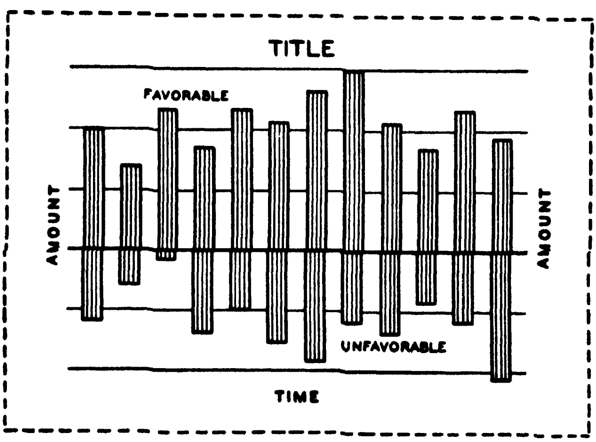


Fig. 6.20. Floating column chart

A floating column chart (Figure 6.20) is a special variation of the subdivided column type. The total length of the column represents the total of the two main components, one of which is plotted above the base line and the other below, the latter often being considered to carry an unfavorable connotation. The total length of the column, for example, might represent the total number of contracts completed during a month, the portions above the base line indicating the number completed on or ahead of schedule, and the portions below the base indicating those completed behind schedule. This type of chart differs from the net deviation chart in that each column may extend both above and below the base. Floating columns, in effect, are subdivided columns with the division between segments used as the base. The over-all length of the column is thus subordinated to the comparison of the segments.

A range chart (Figure 6.21) emphasizes the difference between two sets of values. The top plotting represents a maximum value, the bottom a minimum value, while the distance between indicates the range. Supplementary information such as the average value can be readily included by means of small wedges or other indicators. The range treatment can also be used for surface charts.

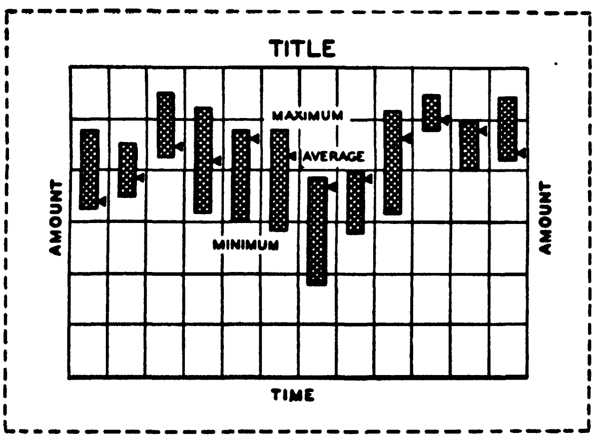


Fig. 6.21. Range chart

BAR CHARTS

The bar chart differs from the curve, surface, and column charts in having only *one numerical scale*. This scale measures magnitudes horizontally; the vertical dimension is used for listing the items covered. Because the horizontal arrangement presents a definite contrast with the vertical arrangements of columns, the bar chart provides a ready visual distinction

between item comparisons and time series-data or frequency distributions. In bar charts the sequence of items is particularly important. Appropriate sequences may be (1) alphabetical, (2) chronological, (3) geographical, (4) qualitative—according to some attribute of data, (5) quantitative—in order of the magnitude of the data, (6) progressive—in order of development. The zero line in the bar chart should never be omitted. Bars should not be broken except to show occasional "freak" values.

Bar charts may be used effectively to show how a number of items differ from one another as to one or two characteristics or to show how a number of items differ as to the distribution of components. A writer should not use bar charts to present time trends or frequency distributions.

A **simple bar chart** (Figure 6.22) consists of a series of horizontal bars drawn to the right of a common base line and measured by a few vertical scale lines. The thickness of the bars has no measurement value and therefore should be uniform. A bar is used to indicate a different category, such as a total or an average. The writer may set it off from the other bars by additional space or by using a different shading.

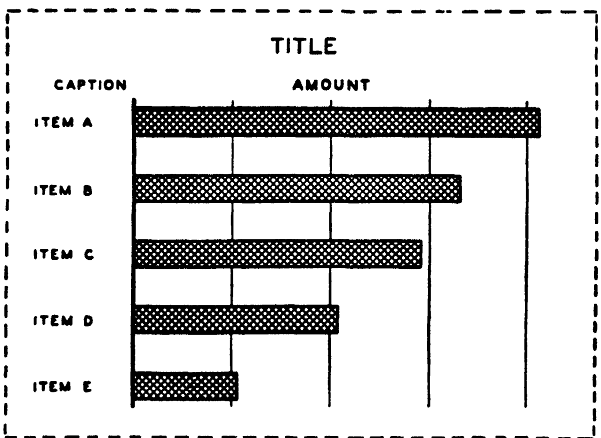


Fig. 6.22. Simple bar chart

A **bar-and-symbol chart** (Figure 6.23) adds supplementary information to a bar comparison by using crossbars, diamonds, circles, and other symbols to present the supplementary information. Forecasts, averages, or other standards are often shown in this way. The most common use of symbols on a bar chart, however, is to show data as of some previous time period for comparison with the data shown by the bars themselves. This type of chart can sometimes be used to summarize a number of time-trend charts.

A **subdivided bar chart** (Figure 6.24) effectively shows a limited number of components, rarely more than three or four, common to a group of items. This type of chart is sometimes called a "segmented bar" or "composite bar" chart. The largest or most important component is generally placed next to the zero line. As in the subdivided column charts, a writer cannot readily make close graphic comparison of components except for

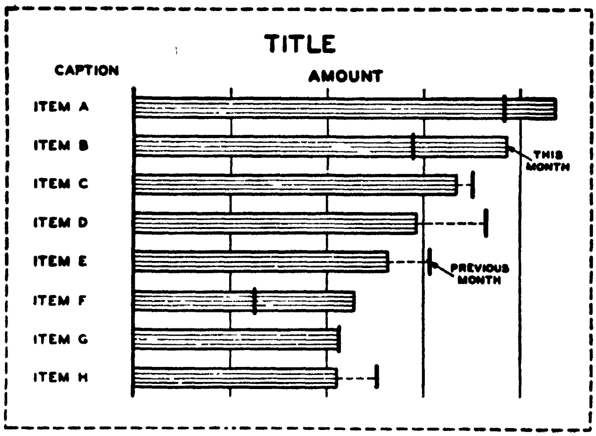


Fig. 6.23. Bar-and-symbol chart

those next to the base. When he uses the subdivided chart to show the percentage distribution of components, he constructs all the bars of equal length and provides for direct comparisons by the components adjacent to the 100 per cent line as well as for those next to the zero line. This variation is known as the "100 per cent bar chart."

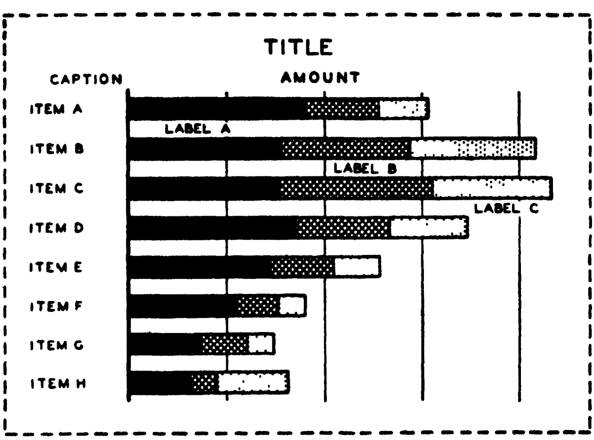


Fig. 6.24. Subdivided bar chart

A grouped bar chart (Figure 6.26) permits comparison of a number of items in two, and rarely more, respects at the same time. A writer should shade the bars in sharp contrast so that comparison of items is used as the basis for determining the sequence. He may use the category of major interest generally as the basis for determining the sequence. To emphasize the group arrangement vertical space between groups should be no less

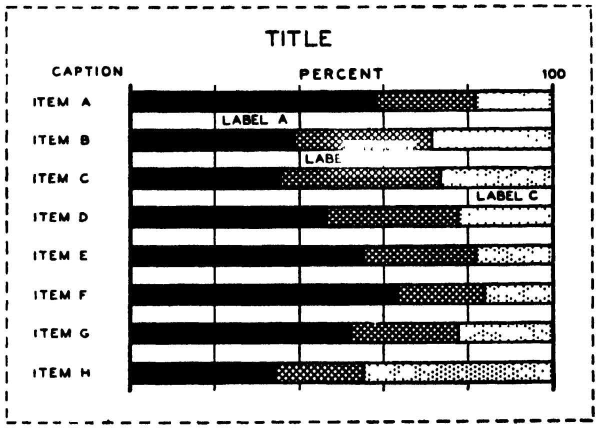


Fig. 6.25. 100 per cent bar chart

than the width of a bar. When space permits, he will find that the grouped bar chart is preferable to the bar-and-symbol treatment for describing this kind of data. Groups of more than two bars are seldom desirable because they present too many comparisons at one time.

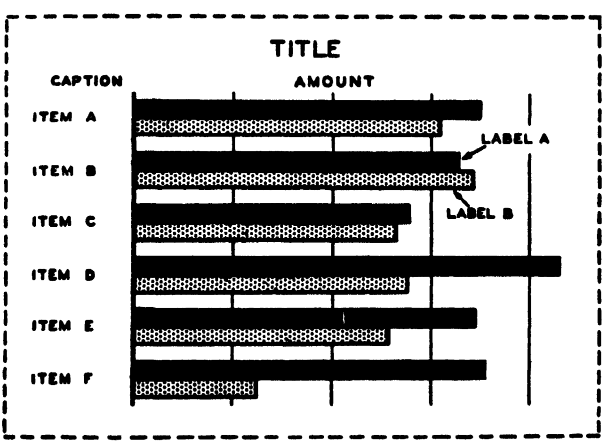


Fig. 6.26. Grouped bar chart

A paired bar chart (Figure 6.27) provides an alternate method of comparing a number of items in two respects. It is particularly appropriate and even preferable when different units or scales are required for each category. Instead of grouping the bars, the writer sets them opposite each other, one set extending to the right of the designations and the other to the left. The bars at the right, for instance, might represent the cost per

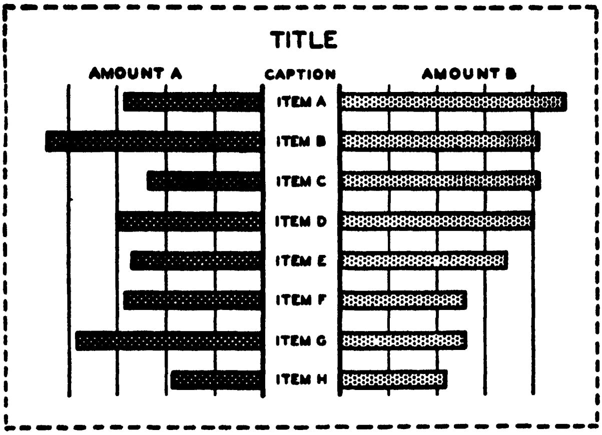


Fig. 6.27. Paired bar chart

unit, those at the left the number of units produced. Bars extending to the left, as with columns extending below the zero line, carry a slightly unfavorable connotation. If the nature of the data permits such an arrangement, the writer should use it.

A deviation bar chart (Figure 6.28) likewise presents bars extending to

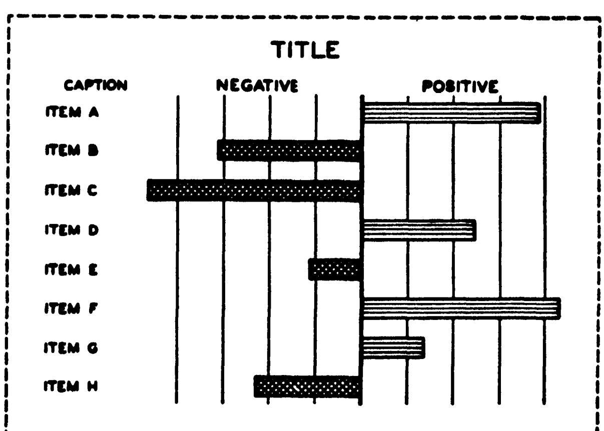


Fig. 6.28. Deviation bar chart

the left and right, but in this visualization the bars appear at the left *or* right for comparing differences between actual results and some estimate or standard, especially when these differences are so small that a scale suitable for showing the total amounts would not provide an effective picture. Bars extending to the right, for example, represent "more than . . . " and bars extending to the left represent "less than . . ."

A sliding bar chart (Figure 6.29) is substantially a variation of the subdivided bar chart. The length of the bar represents the total of two main components, one of which extends to the left of the base line and the other to the right. The two segments may be shaded differently and even further subdivided if appropriate. A writer may use this type of chart to show either absolute values or percentage values where each bar represents 100 per cent.

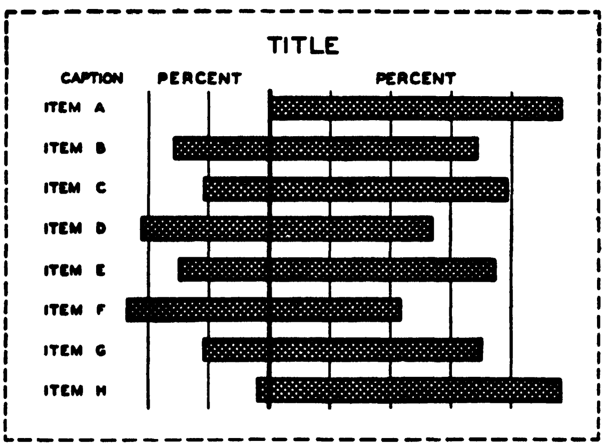


Fig. 6.29. Sliding-bar chart

COMBINATION TYPES OF CHARTS

By the combination of graphic forms a writer can develop charts that clearly present the characteristics of the information he is discussing. When he develops such combinations, however, he must remember that what he is trying to do is not to invent a novel form but rather to devise the best means to communicate information clearly, concisely, and accurately.

A **surface-and-curve chart** (Figure 6.30) uses a curve to represent a standard or requirement in conjunction with a simple surface chart picturing the actual level of attainment. This is a simple but effective combination chart. The writer will find that it is generally inadvisable to add an independent curve to a subdivided surface chart, but there are some occasions when such a combination is useful.

The column-and-curve staircase (Figure 6.31) often makes a more striking picture than two curves showing the same information. This form of chart is especially suitable for comparing two quite different kinds of things, one of primary and one of secondary interest.

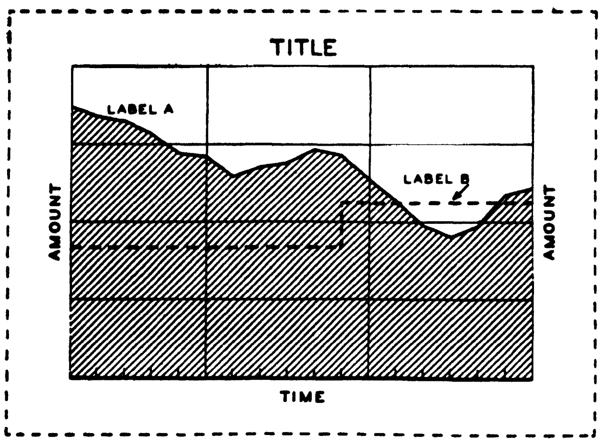


Fig. 6.30. Surface-and-curve chart

The column-and-slope curve chart (Figure 6.32) is a special column-and-curve combination which is very useful. Columns measure results for each period against a standard or goal which is indicated as a straight line or staircase curve. A slope curve showing the aggregate difference between results and goal is then superimposed. At a glance the reader sees the results for each period and the cumulative effect of these results.

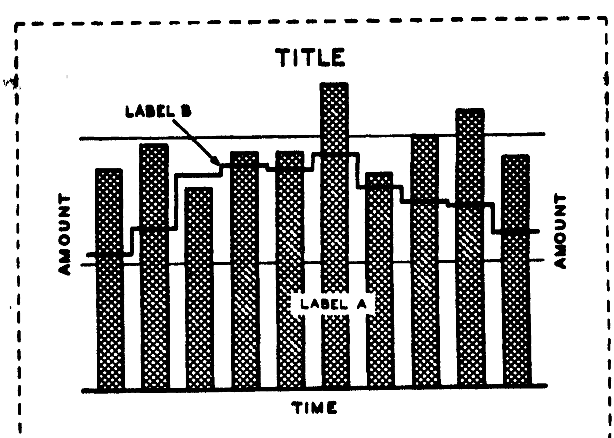


Fig. 6.31. Column-and-staircase chart

The split-scale combination (Figure 6.33) provides a format on which effective results can be charted by showing different phases of a subject on separate grids. The chief purpose of this combination is to provide both a close-up of the current picture and a look back at the over-all picture

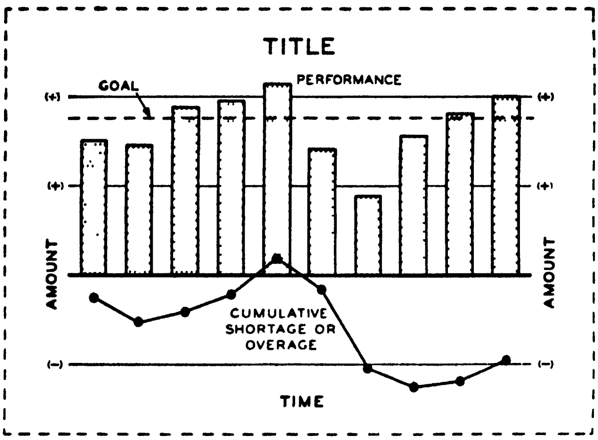


Fig. 6.32. Column-and-slope curve chart

prior to the current period. The chart can be used to compare yearly totals with current monthly data which have been cumulative, to compare current results with earlier results, or to show quarterly averages over a number of years compared with monthly data for the current year.

A pie chart compares data by subdividing a circle into sector areas which compare the relationships of the information visualized. Although

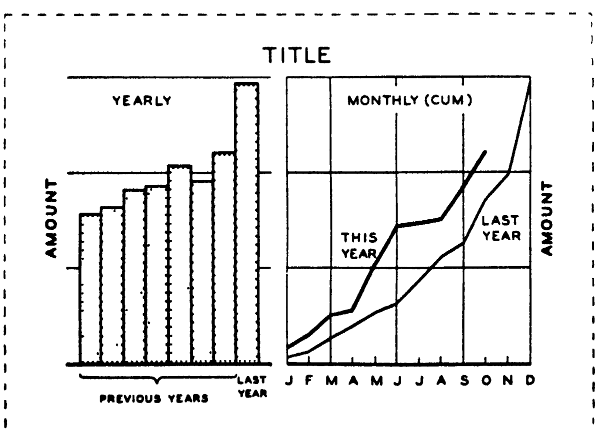


Fig. 6.33. Split-scale combination chart

the pie chart is simple to construct and is both direct and nonstatistical, the eye does not compare areas and angles as easily as it does linear distances. By presenting data in a bar rather than in a pie chart, the writer gives his reader a more accurate picture. The bar chart fits better on the page. The writer can moreover subdivide the bars if he wishes. A series of pie charts is also less satisfactory for showing a number of totals than a series of subdivided bar or column charts. One of the chief uses of the pie

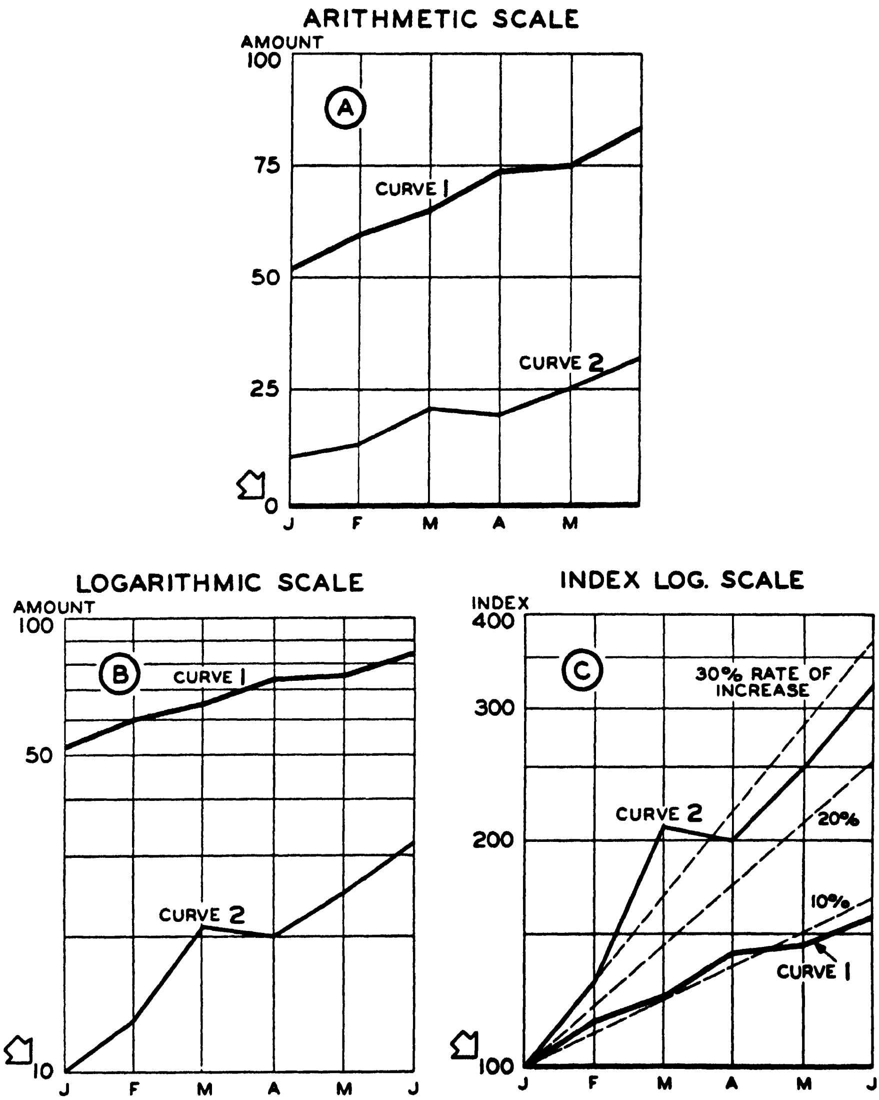


Fig. 6.34. Comparative presentation of the same data: Arithmetic, logarithmic, and index log scales

chart has been the explanation in budget statements and fiscal analysis of where the dollar comes from and goes to.

A logarithmic scale chart (Figure 6.34) provides a useful means for comparing ratios instead of absolute amounts. The two dangers which a writer faces in using a log-scale chart are that (1) he will use it improperly, and (2) the chart will be misread even if properly used. For these reasons a writer should use it only when he cannot visualize his data satisfactorily by some other means, such as a conventional percentage measurement. Before he uses a log-scale chart he should decide that his interest in using it is only in *rate of change* rather than in *amount of change.* If he does use this style of chart, he should clearly explain that it shows *rate of change.*

Briefly stated, on the arithmetic scale equal distances represent equal amounts. Thus the distance from 1 to 2 is the same as the distance from 2 to 3, 3 to 4, and so on. On the logarithmic scale, equal distances present *equal ratios.* Thus the distance from 1 to 2 is the same as the distance from 2 to 4, 4 to 8, 8 to 16, and so on—in each case a ratio of 1 to 2. This property of a logarithmic scale produces the characteristic feature that a series of constant percentage changes plotted on a chart having a logarithmic amount scale appear as a *straight line.* Equally important is the fact that a given rate of change always appears at the same angle, whether occurring at the top or at the bottom of the chart. The arithmetic scale chart has neither of these features. Curves plotted on a chart having a logarithmic amount scale, therefore, present a picture of rate of change. By the use of this type of chart a writer can compare rates of increase or decrease between different curves or between different portions of the same curve. He can, for example, compare the rate of increase in work load with the rate of increase in personnel, to determine whether the two were consistent or divergent.

Graphic tables provide an arrangement for entering data classified into a few main groups by means of an appropriate visual device used to indicate each group. By means of status and progress charts, shown in Figure 6.35, for example, a writer can group information in comparative summary fashion. By ingenious adaptation of this form of presentation, he can greatly simplify presentation of data for quick reading and control purposes.

The status chart is probably the most useful of all graphic tabulations. It highlights good or bad conditions and can be used to show either qualitative or quantitative data in terms of performance, condition, or other status measurement. The format is highly adaptable to a variety of cross-classifications.

The progress chart is a graphic check list used to record the progress or lack of progress through a series of processes or operations. In using this type of presentation the writer will often find it desirable to indicate the

date of completion of the various steps and the scheduled date of performance of steps to be taken.

Maps serve a necessary purpose when the element of geographic distribution is paramount and when the visualization would be much less effective in any other form. Before using a map a writer should be sure that he cannot show the same data to more advantage by actual graphic comparison.

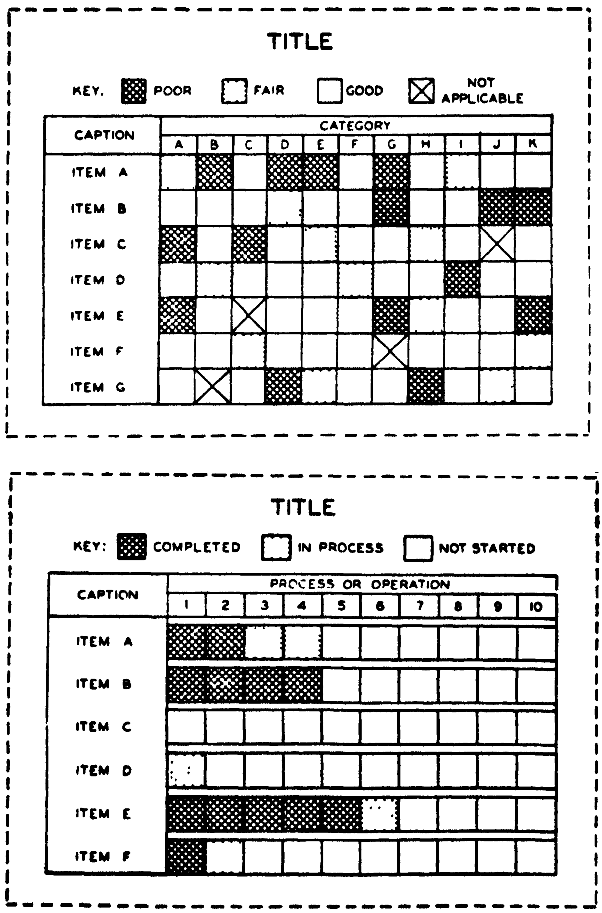


Fig. 6.35. Graphic tables: Status and progress charts

Pictographs are pictorial symbols which may be substituted for bars in a chart. The number of pictures indicate quantities, each symbol representing a certain number of units. The symbol should portray the type of person or thing with a clear and certain identification. Pictographs are especially useful in making reports more interesting to laymen.

No matter what type of graph is selected as the vehicle for the communication of ideas, the writer should always remember that the object of graphic presentation is not to be novel or spectacular, but to make clear statement. When properly used, graphic language helps a writer to be precise, direct, accurate, and interesting. By careful study of graphic method, a writer will develop the habit of selecting the right kind of chart for the right purpose. By analytic visual thinking he will bring to focus in each chart the decisive facts which need to be shown in their relationships.

Pictures, like charts in a report, describe situations and explain relationships. Often they communicate ideas more vividly, accurately, and satisfactorily than words can do. To be a genuine part of the presentation the picture, as a general rule, should be photographed especially for the report, for the purpose it is to serve, and for the point of its appearance. Figure 6.36 summarizes the qualities of a good report picture.

In planning a picture a writer thinks through what he wants to communicate by means of the picture. He identifies the significant ideas, positions, types, and relationships which he wants to emphasize. He develops a "feeling" for the picture as well as a mental understanding of its subject. Then he works with his photographer to take the picture so that it will be strong with functional action. Good pictures result only from the painstaking and patient teamwork of photographer and writer. As a rule the writer lacks the technical skill of the photographer; the photographer lacks the feeling for the subject which the writer has developed. Together writer and photographer can produce pictures which increase the effectiveness of reports.

USE OF SLIDE CHARTS FOR TECHNICAL PRESENTATION

Technical presentation makes effective use of slides to show charts to groups. Because he may use them often a report writer needs to understand how to build slides. The preparation of a slide chart involves four operations:

1. selection of material to be included in the presentation
2. composition of the text
3. drafting of the chart
4. production of the slide

Eight qualities summarized in Figure 6.37 combine to produce a good slide chart which is at once simple, brief, and legible.

In selecting material for a slide chart the writer must determine the significant relationships that can be presented graphically and in logical sequence. In composition he needs to give attention to (1) spacing, (2) the size and style of lettering, (3) line thickness, and (4) color. The techniques

involved in color slide reproduction are beyond the scope of this discussion. It is, however, worth mentioning that the General Electric Research Laboratory uses the Ektachrome process. This method yields a positive film transparency which can easily be bound between sheets of cover glass.

In preparing a slide the chart draftsman bears in mind that the *curve* is the most important part of the communication and therefore should have the heaviest weight of line to distinguish it sharply from the background. The general features of a good slide chart as suggested in Figure 6.37 are based on an original vertical chart 6″ x 8¼″ including the margins. Since the outside dimensions of the standard slide are 3¼″ x 4″, the draftsman should follow the proportion of 3:4 in the preparation of his copy.

A GOOD REPORT PICTURE

1. has technical excellence as a photograph
2. attracts and holds the reader's interest, inducing him to stop, look, and read
3. develops and emphasizes a point by means of the visual image
4. ties into the context of the presentation, picking up the thread of the word narrative, moving it forward, and setting the stage for a further development of the thesis of the report
5. is accurate and genuinely significant
6. represents the result of a studied effort on the part of the report writer to give visual expression to ideas and representations which can best be communicated by a photograph
7. is authentic, objective, and colored by a feeling which the writer wants the reader to have toward the subject
8. possesses representative action and human interest in a fully functional setting
9. is introduced, when necessary to the style, by a one-line overhead which sharply and interestingly alerts the reader to the purpose of the picture at that particular point in the report
10. is explained by a caption—brief, descriptive, compact, and written to fit the unit count on the dummy
11. is in harmony with the policy of the organization issuing the report
12. is laid out on the page and in context as an integral part of the flow of the report
13. leaves the reader with a representative image
14. shows thoughtful composition, idea content, and insight on the part of the writer and his photographer

---

Fig. 6.36

A GOOD SLIDE CHART

1. shows material selected and arranged so that the audience can quickly grasp the idea
2. focuses on one idea
3. presents that idea with visual clarity
4. keeps the number of words of text to a minimum—under 30 including the title
5. eliminates text, letters, and lines not essential to clear statement
6. uses legible type which can be read by spectators at room distance—an inch-high letter for 25 feet of reading distance
7. assumes that the key words on the chart will be explained by the speaker
8. is sent to photographer reasonably in advance of need—at least three days for black-and-white and a week for color

Fig. 6.37

The size of the lettering on the draft chart depends upon the quantity of material presented and the maximum viewing distance. Slides which will be easily seen by the audience require a letter height which is directly proportional to the maximum viewing distance, inversely proportional to the minimum viewing distance, and inversely proportional to the magnification of the copy on the screen. The working schedule of the letter height related to viewing distance recommended in Figure 6.37 should be helpful. The American Society of Mechanical Engineers suggests that the calculation of minimum legible letter size can be determined from this formula:[2]

$$\text{Height of letter on slide (inches)} = 0.040 \times \frac{\text{distance, farthest spectator to screen}}{\text{distance, lantern to screen}} \times \frac{\text{focal length of lens in inches}}{12}$$

The society has found that legibility throughout the average lecture hall or auditorium is assured if the smallest lettering on the slide consists of capital Gothic letters 0.040 inches to 0.045 inches high with a line width of about 0.006 inches.

General Electric Research Laboratory technical editors visually test slide material by what is known as the D/S = 6 formula in which D represents the maximum distance from the observer to the screen and S the

[2] See *Engineering and Scientific Charts* (New York: American Society of Mechanical Engineers, 1947), p. 9.

width of the screen picture. The original copy of the material to be reproduced in the slide is viewed at a distance by the formula

$$V = \frac{D}{S}\,\frac{W}{12}$$

in which *V* represents the viewing distance in feet, *W* the width of copy in inches, *D* the maximum distance from the observer to the screen, and S the width of the screen picture.

Printers describe type sizes by "points." A point is 1/72 of an inch, measured from the top of the tallest lower case letter, as for example *l* or *k* to the bottom of a descending letter like *p*. Otherwise stated a point is equivalent to .0138″.

The General Electric Research Laboratory uses the lettering specifications for slide copy preparation summarized in Figure 6.39.

MAXIMUM VIEWING DISTANCE (feet)	MINIMUM LETTER HEIGHT (inches)
10	3/8
20	3/4
40	1 1/2
60	2 1/4
80	3
100	3 3/4

Fig. 6.38. Relationship of viewing distance to letter height

Under urgent conditions slide copy may be prepared on the typewriter, preferably in UPPER CASE PICA, but typewritten copy for slides must be held within an area not larger than 6¾″ by 9″. Pica lettering runs 10 letters to the inch. An original typewritten chart of 5¼″ x 7½ inches reproduced at 40 per cent of its original dimensions will then give a good projection. A glossy print or half tone can be reproduced on a slide. To give the appearance of authority, slide charts should be carefully prepared and designed by expert draftsmen.

GUIDE TO CHART-MAKING EQUIPMENT

A kit necessary to make charts includes

Drawing board	12″ x 17″	or	16″ x 21″
T-square	18″	or	24″
Triangles	5″ 45°	or	8″
	6″ 30°-60°	or	9″

For pencil work

Engineer's triangular scale	12″	or	18″
H and B drawing pencils			

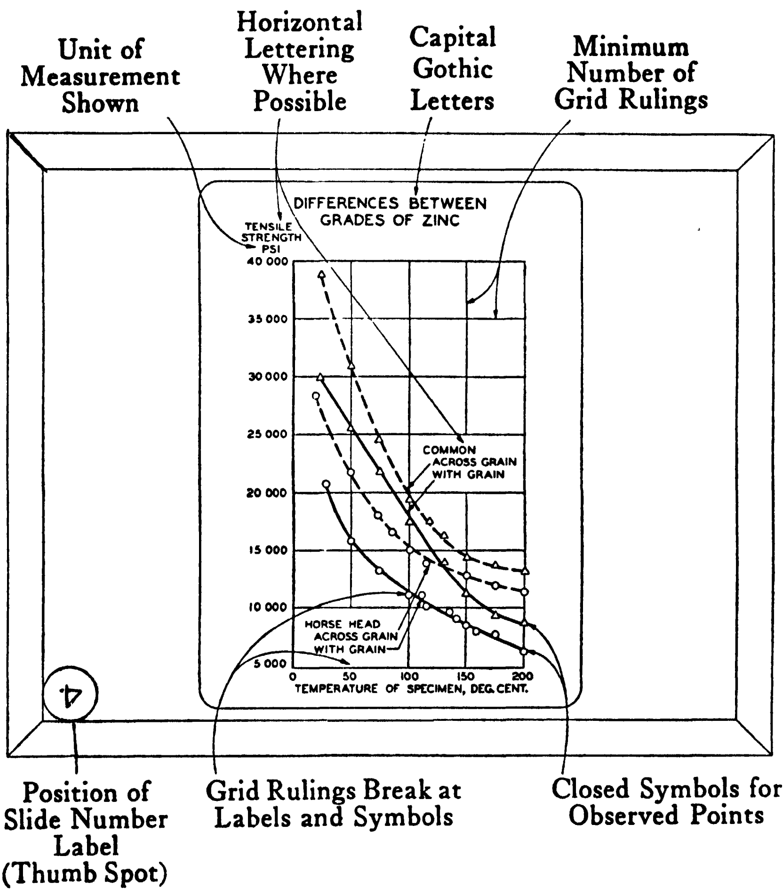
Set of 12 or 24 Mongol Colored Indelible pencils—strong, thin leads
Indelible leads may also be used as watercolor
Red, green, yellow, and blue very hard Mongol pencils for plotting. These pencils will not smear
Art gum
Ruling pen

Add for ink work

Compass, pen-and-ink combination
Waterproof ink
Ink eraser—mechanical type if you are working on heavy paper

For hand lettering

Speedball pens and lettering guide book; pens available in wide selection of widths and styles



Extracted from "American Standard Engineering and Scientific Charts for Lantern Slides" (ASA Z15.1-1947) with permission of the publisher, The American Society of Mechanical Engineers, 29 W. 39 St., N.Y. 18, N.Y.

Fig. 6.39. Suggestions for good slide chart construction

Payzant pens—equipped with well to carry ink; nine width; useful for borders or heavy trend lines

Leroy socket pen—for advanced work; can be used with Leroy mechanical lettering set

Stock lettering

Paper

Strathmore—3 ply; 1-ply for charts on which scales, titles, or trend labels are to be typed

Color and crosshatching

For crosshatching and color use *Zip-a-Tone* which comes in 17 different colors and 50 black-and-white patterns. These materials are manufactured by the Para-Tone Company, 343 South Dearborn Street, Chicago 4, Illinois. Colored tapes may be used, but they do not always come in the right widths.

Commercial suppliers offer various kinds of acetate material with adhesive backs for use in lettering, the construction of pictograph, and charts. Some of the trade names are Art type, Chart-pak, Fototype, and Vistype.

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TRY YOUR HAND AT THESE •

- **to become acquainted with the structure of the chart**
- **to use charts for simplifying reports**
- **to recognize effective pictures for reports**
- **to learn how to construct and use slides**
- **to practice making and using charts, pictures, and slides**

1. Clip ten different kinds of charts. Identify them according to types discussed in this chapter. Using technical terms in your explanation, indicate by the use of one of your charts the component parts of the chart skeleton.

2. From the table developed in problem 4 of Chapter 5, design an appropriate chart.
3. From the table developed in problem 5 of Chapter 5, design an appropriate chart.
4. Clip five pictures which are related to the field in which you are writing your long form career report. Tell why they are effective or ineffective illustrations.
5. In your long form career report you are going to be able to use three pictures. Decide what three situations will tell the most about the career. Then write a letter to your brother, who is a good amateur photographer, asking him to take the pictures you want.
6. Design two slides which will summarize the conclusions reached in your report based on problem 7 of Chapter 2.

7

READABILITY

REPORTS ARE WRITTEN TO BE READ. THE LANGUAGE THEREFORE SHOULD BE as easy to read as the subject permits. The composition of straight speech results from the painstaking effort of the writer to make his manuscript readable. In working through his problem, he has been concerned more with getting the best solution than with its clear communication. Now he faces the responsibility of making his document as readable as possible.

READING THE MANUSCRIPT ALOUD

At this point the writer gains much by reading his manuscript to himself aloud, sentence by sentence, paragraph by paragraph. The rhythm of his voice tells his sensitive ear much about the balance and effectiveness of his phrases, much about the logic, coherence, and flow of his ideas. He goes back and rereads sentences which do not sound quite right. He changes words and alters phrases until they speak the thoughts he wants them to

express. He strengthens transitions and ties his ideas together to form a coherent progression without "blind spots." At this late stage a good writer has the gumption to go back and recast sentences, to restate paragraphs, and to reorganize sections that do not completely satisfy him. He performs this task much as the barber takes his shears and trims ragged spots before he finally wets and combs his customer's hair.

CRITICISM OF OTHERS

The writer cannot look at his own work with full objectivity. He needs to know what other people think of his text. Their criticism will help him to uncover defects in content and style which he has overlooked. By asking laymen as well as experts to read specific sections on which he wants advice, he begins to see how readers are going to react to his writing. He weighs every suggestion, using each valid criticism to improve his copy. He cultivates the habit of appreciation, not resentment, when others give him helpful suggestions. He never rises to the defense of bad writing just because he wrote it. His goal, like the objective of every artist, is a perfect performance.

REVIEW OF SENTENCE LENGTH

Language, however perfect it may be from the standpoint of grammar and logic, can be hard or easy to read. Research shows that one factor

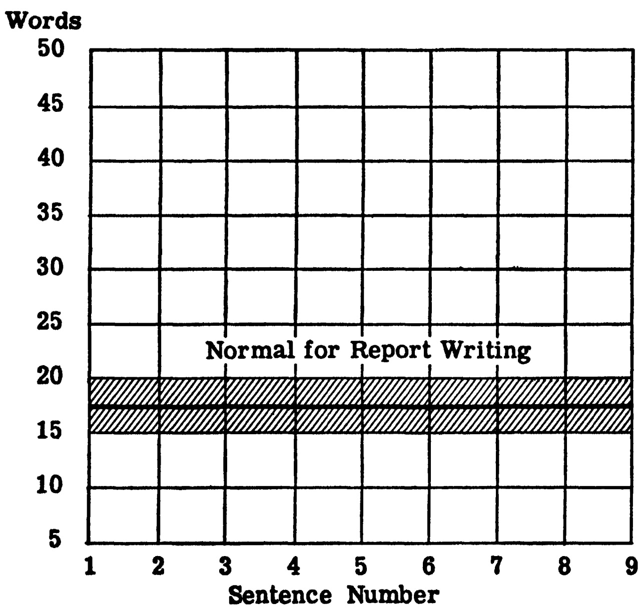

Fig. 7.1. Sentence profile: words per sentence

which makes reading difficult is the long sentence. Every formula for measuring the level of reading difficulty includes sentence length. A writer can use the simple chart suggested in Figure 7.1 to visualize the length of his sentences within a paragraph. In good report writing the average sentence ranges from 14 to 21 words.

To use the Sentence Profile a writer merely counts the number of words in each sentence and plots the length as a vertical column. The picture which results will show how the length of the sentences in a paragraph correspond to the normal in good report writing. It will further show whether sentences vary in length. Of course they should, to keep the paragraph from getting monotonous.

EVALUATION BY USE OF A PARAGRAPH SCHEDULE

At some points a writer may wish to find out how his paragraphs compare with generally accepted standards of good writing. The Paragraph Evaluation Schedule in Figure 7.2 suggests some yardsticks. If a writer finds his paragraphs running over 100 words, he needs to ask himself whether they deal with more than one central thought.

PREFERENCE FOR SHORT WORDS

Some writers want a mathematical index to tell them how hard or how easy the reader will find the language. Every formula for measuring reading difficulty recognizes that hard words make hard reading.

A writer can make a rough prediction as to whether he is meeting his audience on its own ground by checking the number of words of more than one syllable in his text. Let him select thirty 100-word samples at approximately equal distances throughout his report. The random selection assures enough text to make the sample statistically reliable; the 100-word units make percentage calculation easy. The writer takes his pencil and strikes out all the words of one syllable, that is, all the monosyllables. He then counts the unmarked words which remain, that is, the polysyllables. The sum of these words of more than one syllable gives the percentage of polysyllables in the manuscript.[1] When this percentage exceeds 30, the writing tends to be over the eighth grade level; the writer is shooting over the heads of three-quarters of the American people. In a manuscript for general reading, 70 per cent of the words should be monosyllables. Perhaps a writer thinks it impossible to express great ideas in short words? Then he should study the Lord's Prayer. Four out of every five of its 69 words are one-syllable words.

[1] George R. Johnson, "An Objective Method of Determining Reading Difficulty," *Journal of Educational Research*, April, 1930, pp. 293-97.

GUNNING'S "FOG INDEX"

During the last fifteen years research has been making progress in the statistical measurement of reading difficulty. The two formulas most generally used today were developed by Robert Gunning and Rudolf Flesch. These readability specialists built on the findings of a number of scholars who began the inquiry well before the outbreak of World War II.

After sixteen years in newspaper and editorial work, Gunning established himself as a counselor on "clear writing" for large corporations. Among his clients he counts the United Press, the Scripps-Howard Newspapers, and the Standard Oil Company of New Jersey. Gunning has built his professional career on the assertion that people who have something to say can learn to say it simply. He insists that "wisdom goes arm in arm with simplicity" and that "the keen mind is one that can absorb a compli-

1. *Paragraph*	STANDARD OF GOOD WRITING	WRITER'S PERFORMANCE
Pages	2½ paragraphs to a double-spaced typewritten page	
Words	100	
Sentences	5	
2. *Sentence* Number of words	14-21	
Simple sentences	40%	
Complex sentences	40%	
Compound sentences	20%	
Periodic sentences*	45%	
Loose sentences	55%	
Declarative sentences	90%	
Interrogative sentences	8%	
Imperative sentences	2%	
Sentences beginning with subject	40%	
3. *Words* Prepositions (*each 100 words*)	10	
Personal references (*each 100 words*)	6	
Polysyllables (*each 100 words*)	30	

* See Chapter 10 for explanation of periodic and loose sentences.

Fig. 7.2. Paragraph evaluation schedule

cated problem and state it in simple direct terms that will transfer the idea quickly and accurately to the minds of others." Gunning labels as "fog" all writing which fails to make ideas clear. He has built a new business as a consultant in clear writing by holding to the principle that "readers resist prose which requires more than high-school sophomore skill."[2]

Gunning developed a formula to measure the difficulty of reading matter by the use of a "yardstick." He wanted a tool which would be (1) easy to use, (2) reliable in measurement, and (3) valuable to call a writer's attention to the factors which cause readers most difficulty. After much experimentation he built a formula to include the two factors of (1) average number of words in a sentence and (2) the number of "hard words," defined as words of three or more syllables, in each 100 words of text. He called his formula the "fog index." Here it is:

$$S\,P + P\,S \times .4 = Fog\ Index$$

In this formula *S P* stands for the average sentence length. This figure is obtained by dividing the number of words in a passage of text by the number of its sentences. *P S* means the percentage of words of three or more syllables, that is polysyllables.

To find the "fog index" of his manuscript, a writer marks out samples of approximately 100 words each, spaced evenly throughout the document. In counting these samples he stops his count with the sentence that ends nearest to the 100-word total. He then divides the number of words in all the passages by the number of sentences. The result is the average sentence length. This figure is placed in the formula as the *S P* item. Next he counts the number of three-syllable (or more) words in each 100-words and substitutes this figure for *P S* in the formula. In counting these polysyllables the writer does not count words which are capitalized, words which are combinations of short, easy words, like "bookkeeping," or verb forms raised to the three-syllable level by adding "ed" or "es," like "created." (3) Gunning thinks that easy reading matter should have a "fog index" of approximately nine. Finally, he adds *S P* and *P S* and multiplies by .4. The result is the "fog index," which corresponds to school grades.[3]

THE FLESCH FORMULA

Probably the most generally used and discussed measure of readability is the formula developed by Rudolf Flesch. Born in Austria in 1911, Flesch took his undergraduate and graduate degrees from Columbia University

[2] Robert Gunning, "For Easy Reading," *Library Journal*, March 15, 1952, p. 476. Also Gunning's *The Technique of Clear Writing* (New York: McGraw-Hill Book Company, Inc., 1952), pp. 36-37.

[3] For a discussion of the formula, see Robert Gunning, *The Technique of Clear Writing* (New York: McGraw-Hill Book Company, Inc., 1952), pp. 36-39.

between 1940 and 1943. Serving successively as research assistant to the American Association of Adult Education, the Columbia Broadcasting System, and information specialist in the Office of Price Administration in World War II, he quickly became a foremost authority in the field of readability. Corporations such as General Motors and the Associated Press became his clients.

Flesch developed his basic formula in his doctoral dissertation at Columbia under the direction of Professor Irving Lorge in Teachers College. Teachers College published the study in 1943. To understand the history and background of readability formulas, one must read Flesch's dissertation. Flesch explained his formula fully and more popularly in his book, *The Art of Plain Talk.* He later simplified the presentation for use by government writers in a twelve-page five-cent leaflet developed in cooperation with the Procedures and Records Committee of the Council on Personnel Administration and published in 1946 by the Government Printing Office. The New York *Daily News* produced a motion picture demonstrating readability, and Macfadden Publications publicized the formula in a spiral-bound manual. In 1951 Flesch reduced his formula to a handy pocket book. General Motors incorporated the "yardstick" into a copyrighted pocket gadget called the "Reading-Ease Calculator." In his next recent volume, *How to Test for Readability,* Flesch divided his previous formula into two parts. His Reading Ease score is worked out like this:

1. *Multiply the average sentence length by 1.015* ______
2. *Multiply the number of syllables per 100-words by .846* ______
3. Add (1) and (2) ______
4. Subtract this sum from 206.835
   Less No. 3 ______
5. The reading difficulty level is ______

The reading difficulty score, as derived from the use of this particular Flesch formula, locates the writing on a scale ranging from 0 to 100. At the bottom of the scale writing is so difficult that it is unreadable for all practical purposes. At the top the language is easy for any literate reader. A reading ease scoring table will be helpful in evaluating the difficulty of the language:[4]

Reading Ease Score	School Grade Level	Readability Characteristic	
90 to 100	4th	Very easy	90%
80 to 90	5th	Easy	86%
70 to 80	6th	Fairly easy	80%
60 to 70	7th or 8th	Standard	75%
50 to 60	Some High School	Fairly difficult	40%
30 to 50	High School; some college	Difficult	24%
0 to 30	College	Very difficult	4½%

[4] Adapted from Rudolf Flesch, *How to Test Readability* (New York: Harper & Brothers, 1951), p. 6, and Flesch, *The Art of Plain Talk* (New York: Harper & Brothers, 1946), p. 205, by permission.

Flesch's second formula provided an interest index. His *human interest score* is worked out like this:[5]

1. Multiply the number of "personal words" per 100 words by 3.635	________
2. Multiply the number of "personal sentences" per 100 sentences by .314	________
3. Add (1) and (2)	________
4. The human interest score is	________

In using the human interest formula, a writer should bear in mind that personal words are all first, second, and third person pronouns and all words that have masculine or feminine gender. Personal sentences are spoken sentences marked by quotation marks, questions, commands, requests, and other words directly addressed to the reader, including exclamations and grammatically incomplete sentences. Just as in the case of the reading ease score, the Flesch human interest index locates the writing on a scale ranging from 0 (dull) to 100 (dramatic). Flesch describes the style indicated by his index as follows:[6]

Human Interest Score	Description of Style
60 to 100	Dramatic
40 to 60	Highly Interesting
20 to 40	Interesting
10 to 20	Mildly Interesting
0 to 10	Dull

In 1954 Flesch issued a new formula in his book, *How to Make Sense.* By simplifying the mathematical technique for gaging the ease with which people read, the new formula includes the counting of all "specific words," such as personal words, numbers, dates, and names, as well as the number of punctuation marks in every 100 words.[7] Although this formula is of interest to specialists in readability, the report writer will find the formulas described in *How to Test Readability* most helpful for his particular purposes. It was on the basis of this formula that General Motors Corporation developed the *Reading Ease Calculator* published by Science Research Associates.

TRANSLATION OF HARD PASSAGES

No amount of statistical measurement of readability can produce simpler and more understandable English. The various devices can only tell a writer how difficult a passage is, how long his sentences are, how

[5] Flesch, *How to Test Readability,* pp. 8, 10.

[6] *Ibid.*, p. 10.

[7] A table comparing published methods of measuring the readability of adult materials can be found in George R. Klare and Byron Buck, *Know Your Reader* (New York: Hermitage House, 1954), pp. 102-103. See also pp. 161-64 of this study for an explanation of the Farr, Jenkins, and Patterson simplified Flesch reading ease formula, which substitutes a count of the number of one-syllable words for that of the number of syllables.

many hard words he has used, how foggy and abstract he has been. The mathematical measurement of his style can make him aware of his difficulty. The writer himself is the only person who can put words on paper in easy-to-read sequence. The writer is the one who must put all the rules into action.

When he needs a tonic, a writer can take a difficult passage and "translate" it with the help of his Webster's dictionary. He can hunt for shorter and plainer words. By the very act of looking a word up in the dictionary and seeing what is said about it, about its word history, about its synonyms, he will come upon simpler and more familiar words. He will improve heavy sections of his text. Sometimes he will find it helpful to refer to the *General Basic English Dictionary*. Any device which helps him to think about words will assist him to achieve clearer statement.

HABIT OF CLEAR STATEMENT

In the end, clear statement becomes a habit. A writer matures as *his* hard work makes it easy for his reader to understand the subject. Ways of measuring readability are only whips that drive a writer to his task until he has eliminated "fog" and talks "plain."

TRY YOUR HAND AT THESE •

- **to become adept at using short words**
- **to learn how to keep sentences short**
- **to experiment with formulas for testing readability**

1. As an example of the power of short words, take the 24th Psalm in the Bible. First count off 100 words. Then strike out all words of one syllable. Count the remaining words, the polysyllables. The sum of the polysyllables will give an index of the difficulty of the words in the passage.
2. Take two editorials, one from the *Wall Street Journal* and one from *The New York Times*. Evaluate each editorial by the use of Gunning's "fog index." Then rewrite the more difficult in the pattern of the one easier to read. Draft a memorandum to the editor, explaining why one editorial is easier to read than the other. Repeat the assignment by evaluating any two front-page news stories from the same two newspapers.
3. You are an engineering student and take the position that a readability formula does not apply to language in your field. Give reasons for your position. Take into consideration the observation of a General Motors report specialist who asserts that he has never seen an engineering report too simply written.
4. You are asked to write a one-page statement for eighth-grade students on careers in the field you have chosen. Measured by the Flesch Reading Ease formula, the score of your manuscript must range between 60 and 70. This

means that the average sentence must run about 17 words and the average word about 1.5 syllables. Draft the statement on the level approximate to the grade.

5. By the use of Gunning's "fog index" score your career report.

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8

PUBLICATION

THE FINAL EVIDENCE OF CRAFTSMANSHIP IN REPORT WRITING LIES IN THE accuracy of the completed manuscript. When a writer submits his report, he says in substance:

> Here is my copy. I have edited it—every fact, every word, every sentence. It says exactly what I want it to say.

An accurate manuscript develops as a result of painstaking revision. Especially it is the product of refinements made on the last draft which precedes the final typing. Working from this copy, a typist can produce a letter-perfect document.

UNIFORMITY IN STYLE

The achievement of uniformity in style becomes a major concern of the writer and his editor. The writer can simplify the whole editorial process

by determining at the beginning of his task a style plan for the guidance of his typist as well as himself. He asks himself questions such as these: "What is to be style for abbreviation, capitalization, headings, names of persons, names of places, punctuation, spelling, sideheads, subheads, and numbers?" Almost every publication and institution has a style pattern with some features of its own which need to be followed.

STANDARD COPY PRACTICES

Standards for the final draft of the manuscript are quite generally agreed upon. The manuscript, unless otherwise specified, should be typewritten on one side only of 8½" × 11" good quality white paper. This size sheet is convenient. It fits standard typewriters, file cabinets, and mailing envelopes. The typist should use a black ribbon and be sure that her type faces are clean.

For purposes of appearance and to help the printer make composition estimates, elite or pica type should be used throughout. All typewriter lines should approximate the same length. Uniform margins should be maintained. The text should be double-spaced, with single-spacing used for extracts, quotations, and special materials to be set in smaller type. New paragraphs should be uniformly indented five spaces. Manuscript pages should be numbered consecutively in the upper right-hand margin corner of each page of copy.

The Government Printing Office prefers to have footnotes numbered by chapters from 1 to 99.

METHOD OF REPRODUCTION

Most reports are issued as typewritten documents. They are prepared for limited and immediate use. As a general rule of thumb, ten or less copies can be most economically prepared by the use of carbon paper. For every type and quantity of report, however, one best method of reproduction exists. The guide to reproduction methods given in Figure 8.1 inventories and evaluates these various methods to show the one best suited for each kind of work.

WORKING WITH THE PRINTER

When the report is to be issued as a printed document, the writer needs to work closely with the printer. Printers know a lot about the habits of writers. If a printer were asked to give advice, his comment would run something like this:

1. **Give me clean copy.**
   a. Please, Mr. Writer, read and edit your manuscript so thoroughly that I will not have to guess what you mean or shudder at your inconsistencies.

GUIDE TO REPRODUCTION METHODS

Based on Equipment and Supplies Commonly Used in Federal Agency Duplicating Shops[1]

PROCESSES → / FEATURES and LIMITATIONS ↓	A PHOTOCOPY (1) DRY CONTACT PROCESS (Ozalid, etc.)	A PHOTOCOPY WET PROCESS (2) CONTACT	A PHOTOCOPY WET PROCESS (3) INDIRECT (Photostat, etc.)	B SPIRIT HECTOGRAPH (Ditto, etc.)	C STENCIL PROCESS (Mimeograph, etc.)	D OFFSET PROCESS (Multilith, etc.) (1) DIRECT-IMAGE	D OFFSET PROCESS (2) PHOTOGRAPHIC IMAGE	E RELIEF, INTAGLIO, AND LARGE-SCALE OFFSET[2] (Letterpress, gravure, lithography) Note Always consult printing officer or GPO liaison in advance
1. NUMBER OF COPIES ORDINARILY FEASIBLE (Including any reruns)	1 to 25	1 to 15		11 to 150[3]	11 to 5,000[3]	26 to 5,000[3]	500 to 25,000[3] (26 to 25,000 for reprint work)	OPEN (Consult)
2. KINDS OF COPY FEASIBLE (Types of work suited to the process)	Any text or graphics			Text, tables and simple charts			Any text or graphics (especially economical for reprinting)	Any text, and any graphics, if quantity justifies
a. TEXT and tables	YES	YES	YES	YES	YES	YES	YES	YES
b Simple charts and line sketches	YES	YES	YES	POSSIBLE	POSSIBLE	YES	YES	YES
c. Complex drawings	YES	YES	YES	NO	NO	POSSIBLE	YES	YES
d Halftones (photographs)	NO	YES (Mediocre)	YES	NO	NO	NO	YES	YES
e. Reprints (Secondary use or recopy of printed or published matter)	POSSIBLE	YES	YES	NO	NO	NO	YES	YES
f. Forms	CLEARANCE RUNS ONLY			Forms of SIMPLE DESIGN or for INTERNAL	for TRIAL or CLEARANCE or TENTATIVE USE	FORMS OF SIMPLE DESIGN	YES	YES
g Forms with fill-in	POSSIBLE	YES	YES	NO	NO	NO	YES	SELDOM FEASIBLE
h Preprinted reproducible master forms with fill-in	Fill-in on preprinted translucency	NO	NO	YES on preprinted matter	YES or die-impressed stencil	YES on preprinted plate	NO	NO
3. COPY REQUIREMENTS (What has to be submitted to shop with requisition) **CAUTION!** Finished work can be no better than original master, stencil, or plate from which job is run	**Any clean legible copy** Should be on one side only of translucent material	**Any Copy**		**Typed hectograph master sheets** (from carbon sets) normally prepared by office ordering job	**Typed stencils** normally supplied by office ordering job Special typing, lettering, or drawing on stencils can be done in shop if justified submit ms marked to specify type and format	**Typed direct-image plates** (paper, plastic or metal) normally supplied by office ordering job Special typing, lettering or drawing on plates can be done in shop if justified, submit ms marked to specify type and format	**Any legible copy** (typewritten, drawn or clipped and pasted, ready to photograph) If special typing, lettering or drawing is needed submit ms or dummy marked to specify type and format	**Manuscript and/or dummy** marked to specify type and format in detail
4. SIZE LIMITATIONS			(Enlargement or reduction feasible)				(Enlargement or reduction feasible)	
a. Original copy	Any length and up to 54" wide	Consult if over 18" x 24"	Any size up to 29" x 37¾"	Up to 14" x 20"	Up to 8½" x 14"	Up to 11½" x 14"	Up to 30" x 40"	
b Reproduced page	Same size as original		Up to 18" x 24"	← Same size as original →			Up to 17" x 21"	
5. COLOR LIMITATIONS (two or more colors of ink, or any one other than standard, only on special justification)	Black on white is standard; other colors possible	Only black on white	Only black on white or reverse	Purple on white is standard Other colors seldom feasible	Colored ink rarely feasible	← Black on white is standard → ← Colored paper occasionally feasible → Colored inks available if properly justified		Colored paper if needed Choice of ink in single color, two or more colors limited
6. FEASIBILITY OF TWO-SIDE PRINTS	NO	NO	NO	YES (With somewhat reduced quality)		YES	YES	YES
7. QUALITY OF RESULTS[4] (assuming average skill and materials) by printing standards a Legibility	Poor to good	Good to very good		Fair to good	Fair to very good	Fair to excellent	Good to excellent	Good to excellent
b Writing surface of paper	Very good	Poor		Good	Pencil fair ink poor	Good to excellent	Good to excellent	Fair to excellent
8. APPROXIMATE MACHINE PROCESSING SPEED[5]	30 seconds per exposure	15 minutes		75 copies per minute	100 per minute	100 per minute	6,000 per hour	Highly variable
9. APPROXIMATE COST (Not counting copy preparation or bindery work)	2 cents a copy (Up to 8½" x 14")	10 cents a copy (Up to 8½" x 14")		**1 Side** 25¢ — First 100 — **2 Sides** 50¢ 3¢ — Each add 10 — 5¢ (Not counting masters at 3 cents a set)	**1 Side** 35¢ — First 100 — **2 Sides** 45¢ 15¢ — Each add 100 — 20¢ (Not counting stencils at 3 cents to 12 cents each)	**1 Side** $0 80 — First 100 — **2 Sides** $1 30 20 — Each add 100 — 28 (Not counting direct image plates at 3¢ to 20¢ each)	**1 Side** $2 80 — First 100 — **2 Sides** $4 15 20 — Each add 100 — 28 (**Including** negatives and plates)	Price on application only

Courtesy Bureau of the Budget, Executive Office of the President, from APPRAISING AND CONTENT OF DUPLICATING SERVICE. *Washington Government Printing Office*

Fig. 8.1. Guide to reproduction methods

b. Let me take it for granted that when you submit your copy you have made all the changes you are going to make.
c. Correct errors that may have crept into the copy during the final typing.
d. Retype over-edited copy. As a writer, you know what you say, but pity me! Too often I have to figure out words like a puzzle in relation to context.
e. Retype illegible handwriting which has been added to the copy. Your handwriting looks more familiar to you than it does to me. I can read the typewritten script so much easier!
f. Don't change your mind after you submit your copy. Late changes make my work harder and your bill larger.
g. Don't do your editing after you get your proof.
h. Submit your copy for approval to the boss before you deliver it to me. Let him change his mind on your typewritten copy, not on my galley.
i. Be sure words and names are spelled correctly. Be consistent in their use.
j. Don't make paragraphs longer or shorter when you read proof.
k. Be complete in your copy. Don't insert additional material which you have forgotten to include.

2. Tell me the kind of type you want to use.

a. Sit down with me and go over your manuscript. I have had a lot of experience that will help you.
b. Make type selection which adds to the attractiveness of the presentation and to the effectiveness of communication.

3. Show me with a dummy.

a. Type your copy on layout sheets which correspond with the pages to be printed so that your copy will fit the space you intend it to occupy. Tell me exactly where you want capitals, bold face, and italics.
b. Block out your space on the dummy to include tables, charts, and pictures.

TYPING LAYOUT SHEETS

Upon request the printer will supply the writer with typing layout sheets. The writer may find it advantageous to typewrite his final copy on them. To decide on the design of a typing layout sheet, a writer and his printer discuss the page size and type face. The printer has a list of the number of characters per inch for each type face. When the type face is selected, the character count of the typewritten sheets can be made to correspond exactly with that of the page proof as the printer will return it to the writer. By the use of the page dummy the writer can also determine the area necessary for charts, illustrations, and tables. Good presentation depends upon close collaboration between the writer and his printer. Printers have had a lot of experience with writers. They can and want to use their experience to help. A writer should take his manuscript and sit down with his printer for a quiet talk. Both have a common objective: to manufacture a carefully prepared manuscript so that it will command the greatest respect and reading attention. How can a writer wrap up his

ideas visually in the most potent package? That is the question which the writer *and* the printer must answer together.

PREPARATION OF TABLE AND CHART COPY

To simplify the work of the printer, the writer should type copy for tables on separate sheets but indicate their location in the manuscript. Likewise he should indicate the location of all charts, illustrations, photographs, and line drawings. He should number the item to coincide with the position marks on the manuscript and in the dummy. Legends and captions, if they must be set separately, should be prepared on separate sheets and keyed to the appropriate illustration or table and the manuscript location.

UNDERSCORING OF TYPE STYLES

Various type faces are indicated by underscoring according to the following formula:

bold face	single wavy line
italics	single straight line
bold face italics	wavy line over straight line
SMALL CAPITALS	two straight lines
CAPITALS	three straight lines

LOCATION OF HEADS

All heads and subheads should be located in their proper places in the text. If the style for the head will require special composition, the copy for such heads and subheads should be grouped on separate sheets for the convenience of the compositor.

BOOK MAKE-UP

Some reports are issued in book form. While the make-up of a book varies somewhat, a standard sequence runs like this:

Half title	i
Blank page	ii
Full title	iii
Copyright notice	iv
Dedication	v
Blank page	vi
Preface	recto
Table of contents	recto
List of tables, illustrations, charts, and cases	recto
Part title	recto (p. 1)
Blank page	verso (p. 2)

Text	recto (p. 3)
Appendix	recto
Notes (if consolidated by chapters for the whole volume)	recto
Glossary	recto
Bibliography	verso or recto
Index (author index precedes subject index if division is made between them)	recto

The text of book pages should be numbered consecutively in Arabic numerals. Preliminary matter such as forewords and prefaces should be marked by the use of small Roman numerals.

The first chapter of a book begins on the right-hand page. Other chapters may follow on left- or right-hand pages unless a chapter begins a division or part. Then it should begin on a right-hand page. Title pages are not necessary on small leaflets or pamphlets, particularly when they repeat the cover information.

COPYRIGHT PROCEDURE

The copyright law provides for the exclusive proprietorship of a work for a first term of 28 years. The copyright may be extended by proper application for a second term of 28 years.

The Register of Copyrights divides works subject to copyright into the following classifications:

Class	Application Form	Type of Work
A	Form A	Book published in the United States.
	Form A-B Ad Interim	Book or periodical in English first published outside the United States.
	Form A-B Foreign	Book or periodical in a foreign language published outside the United States.
B	Form B	Periodical.
	Form B5	Contribution to a periodical.
C	Form C	Lecture, sermon, address, prepared for oral delivery.
D	Form D	Dramatic or dramatico-musical composition.
E	Form E	Musical composition.
	Form E	Foreign—Musical composition.
F	Form F	Map.
G	Form G	Work of art; model or design for work of art.
	Form GG	Published three-dimensional work of art.
H	Form H	Reproduction of a work of art.
I	Form I	Drawing or plastic work of a scientific or technical character.
J	Form J	Photograph.
K	Form K	Print and pictorial illustration.
	Form KK	Print or label used for article of merchandise.
L	Form L	Motion-picture photoplay.
M	Form M	Motion picture other than photoplay.

The procedure to obtain a copyright certificate is simple. Any person may secure copyright for his work by taking these steps:

1. Imprinting the word "Copyright" with the year date of publication and the name of the copyright proprietor on the title page or the page immediately following it, as for example:

© Copyright, 195x by
John J. Smith

2. Obtaining and executing an application with affidavit for registration on a form supplied by the Register of Copyrights, Library of Congress, Washington 25, D.C.

3. Mailing promptly after publication with the statutory notice of copyright two complete copies of the best edition by delivery to the postmaster with a request that the work be transmitted free of charge.

4. Mailing in a separate envelope bearing letter postage the application form accompanied by the registration fee of $4.00.

The Copyright Office issues to the copyright claimant a certificate of registration.

PROOFREADER'S MARKS

A writer will find it helpful to master the sign language used by proofreaders and printers as a shorthand to request editorial corrections.

READINGS

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SKILLIN, MARJORIE E., ROBERT M. GAY, and others, *Words into Type.* New York: Appleton-Century-Crofts, 1948.

SWEET, FRED A., *Handbook for Writers, Editors, and Typists.* New York: E. P. Dutton & Company, 1939.

TAYLOR, HOWARD B. and JACOB SCHER, *Copy Reading and News Editing.* Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1951.

"Preparation of Copy for the Press," *Webster's New Collegiate Dictionary.* Springfield, Mass.: G. & C. Merriam Co., 1949.

∧	Make correction indicated in margin	⌐¬	Raise to proper position.
Stet	Retain crossed-out word or letter; let it stand.	└┘	Lower to proper position.
. . . . Stet	Retain words under which dots appear; write "Stet" in margin.	////	Hair space letters.
×	Appears battered; examine.	W.f.	Wrong font; change to proper font.
≡	Straighten lines.	Qu?	Is this right?
√√√	Unevenly spaced; correct spacing.	l.c.	Put in lower case (small letters).
//	Line up; i.e., make lines even with other matter.	s.c.	Put in small capitals.
run in	Make no break in the reading; no ¶	Caps	Put in capitals.
no ¶	No paragraph; sometimes written "run in."	C+s.c.	Put in caps and small caps.
out see copy	Here is an omission; see copy.	rom.	Change to Roman.
¶	Make a paragraph here.	ital.	Change to Italic.
tr	Transpose words or letters as indicated.	≡	Under letter or word means caps.
	Take out matter indicated; dele.	=	Under letter or word, small caps.
	Take out character indicated and close up.	—	Under letter or word means Italic.
	Line drawn through a cap means lower case.	∿∿	Under letter or word, bold face.
𝔖	Upside down; reverse.	,/	Insert comma.
⁀‿	Close up; no space.	;/	Insert semicolon.
#	Insert a space here.	:/	Insert colon.
⊥	Push down this space.	⊙	Insert period.
□	Indent line one em.	/?/	Insert interrogation mark.
[	Move this to the left.	(!)	Insert exclamation mark.
]	Move this to the right.	/=/	Insert hyphen.
		✓	Insert apostrophe.
		"/"	Insert quotation marks.
			Insert superior letter or figure.
			Insert inferior letter or figure.
		[/]	Insert brackets.
		(/)	Insert parenthesis.
		1/m	One-em dash.
		2/m	Two-em parallel dash.

Proofreader's marks

s.c. It does not appear that the earlist printers had any method of e/
✓ ✓ ✓ correcting errors before the form was on the press/ The learned ~~The~~ ⊙ δ
δ ~~learned~~ correctors of the first two centuries of printing were not
;/ proofreaders in our sense/ they were rather what we should term δ 9
ital/ office editors. Their labors were chiefly to see that the proof corre /-/
sponded to the copy, but that the printed page was correct in its
Caps/,/ latinity ~~that the words were there~~, and that the sense was right. stet
δ They cared ~~but~~ little about orthography, bad letters or purely printers ,/ tr
errors, and when the text seemed to them wrong they consulted fresh
authorities or altered it on their own responsibility. Good proofs in ,/
rom # the modern sense, were ~~im~~possible until professional readers were ×
m employed/men who $\boxed{\text{had}}$ $\boxed{\text{first}}$ a printer's education, and then spent tr
i/ many years in the correction of proof. The orthography of English,
which for the past century has undergone little change, was very
w.f. = fluctuating until after the publication of Johnson's Dictionary, and
capitals, which have been used with considerable regularity for the δ ld
Spell past 80 years, were previously used on the $\boxed{\text{miss}}$ $\boxed{\text{or}}$ $\boxed{\text{hit}}$ plan. The tr
9 approach to regularity, so far as we have may be attributed to the it/
growth of a class of professional proof readers, and it is to them that
we owe the correctness of modern printing. More errors have been ¶ r/
found in the Bible than in any other one work. For many generations
it was frequently the case that Bibles were brought out stealthily, — lead
from fear of governmental interference. They were frequently printed out, see copy
[[from imperfect texts, and were often modified to meet the views of
h/ those who publised them. The story is related that a certain woman ⊔
δ in Germany, ~~who was~~ the wife of a Printer, ~~and~~ had become disgusted l.c./who
δ/f/ with the continual assertions of the $\boxed{\textit{superiority}}$ of man over woman rom.
which she had heard, hurried into the composing room while her
husband was at supper and altered a sentence in the Bible, which he wf. ∨
“/ ”/ was printing, so that it read Narr instead of Herr, thus making the “/ ”/
verse read "And he shall be thy fool" instead of "and he shall be thy A
Cap “ ” lord." The word not was omitted by Barker, the king's printer in K
England in 1632, in printing the seventh commandment He was fined ⊙
41 £3000 on this account.

Example of corrected proof

TRY YOUR HAND AT THESE •

- **to visualize the character of a final report**
- **to develop a uniform style sheet**
- **to practice writing**

1. For your own guidance and the information of your typist, you develop a style sheet. Study Chapter 12. Then you write a memorandum of instructions to the typist, explaining the policy to be followed. In the statement include attention to capitalization, names of persons and places, use of commas, spelling, use of numbers for words and words for numbers, footnote style, and bibliographical style.
2. You have completed a report of 36 typewritten pages. By the use of the "Guide to Reproduction Methods," decide the most economical method for reproducing 50 copies. Then write a memorandum to your employer to request such manifolding.
3. Write a letter to a printer in which you ask him to tell you from his experience with copy ten ways in which writers cause him trouble and make costs excessive.
4. A friend wishes to copyright a map. He asks your advice. Write a letter of explanation, suggesting the procedure in making application and the proper form to be used.

Part Two *focuses upon the language fundamentals of report writing.*

The discerning reader will recognize some facets of his own style, and he will profit by concentration upon the remedies for weaknesses which he recognizes to be his own.

9

WORDS

A WRITER WORKS WITH WORDS. IN BUILDING HIS REPORT HE CONTINUOUSLY asks himself two questions: (1) "What am I trying to say?" (2) "What word will say it best?" He is clear about the idea he wants to communicate; he is careful to choose the proper word to express his thought exactly. At Oxford University Professor Frederic Harrison used to give his writing students this advice: "If you have something to say, all I have to tell you is this: Think it out quite clearly in your own mind. Then put it down in the simplest words that offer." To find out the means by which Gustave Flaubert achieved his powerful style, Walter Pater made a painstaking study of the French novelist's works. He came to the conclusion that for Flaubert there existed but one way to express one thing, one word to call it by, one adjective to qualify, one verb to animate it. "Flaubert," he concluded, "gave himself to superhuman labor for the discovery, in every phrase, of that word, that verb, that epithet."[1]

[1] Lane Cooper, *The Art of the Writer* (Ithaca: Cornell University Press, 1952), p. 351.

ONE WORD WITH MANY MEANINGS

The 26 letters of the alphabet represent a series of signs which the eye associates with sounds heard in the speech of English-language areas of the world. From these symbols more than half a million words in the English language are formed.

That one word may have a number of different meanings is a fact which any reader of the dictionary well knows. In use, however, a word has meaning only for those who agree on it as a label. The word as chosen must be appropriate to convey meaning within the human situation in which it is used. A preacher expounding "*The Words*," by which he means the Holy Scriptures, communicates an entirely different meaning, as Figure 9.1 makes clear, from the daughter who explains to her date that

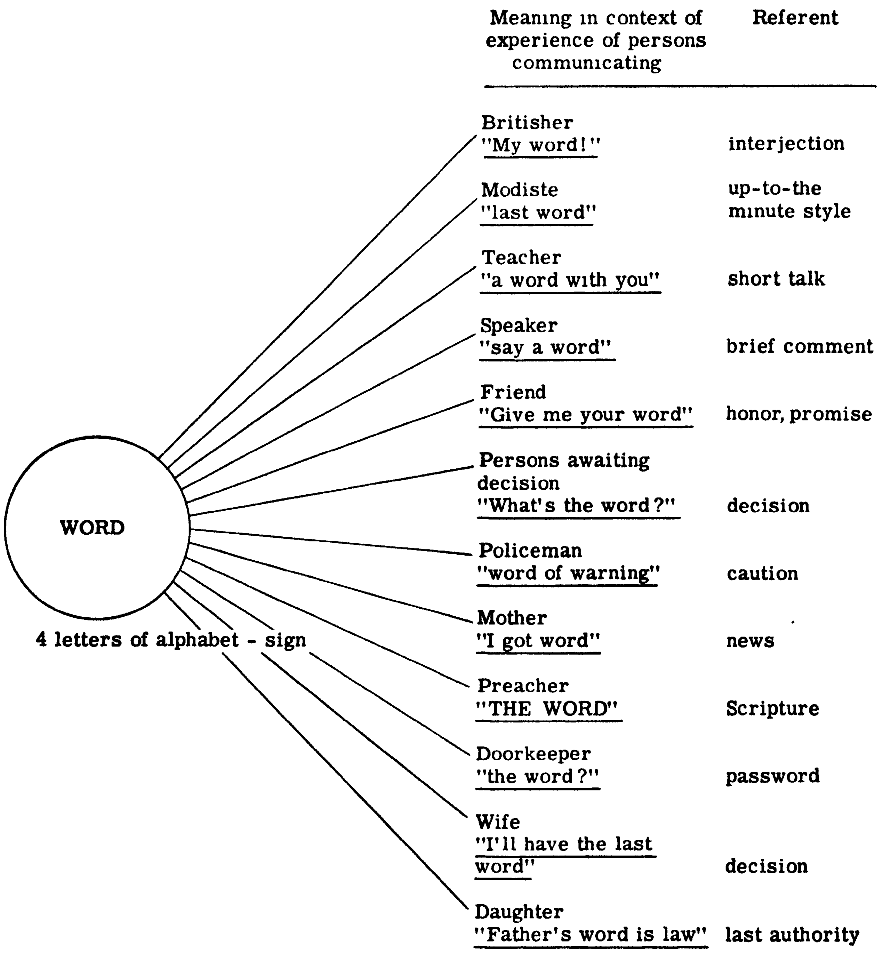

Fig. 9.1. Multiple meanings of one word

"Father's *word* is law." For their complete meaning words depend upon the situation in which they are used. *This relationship of the meaning of a word to the environment and circumstances of its use is known as context.*

WORD DIFFERENCES

As the writer searches for the right word, he discovers that there are many differences, not only in the dictionary definitions, but in the overtones and implications of a word. "What is the difference between this word and that one?" Here is a catalog of eighteen possible differences tied up in a single word. There may for example be differences

1. between the general and the specific
2. between shades of meaning
3. in emphasis
4. in implication
5. in application
6. in connotation
7. in emotional effect
8. in levels of usage
9. between literary and colloquial usage
10. in effects of prefixes and suffixes
11. in idiom
12. in British and American usage
13. between borrowed and native words
14. between literal and figurative uses
15. between concrete and abstract uses
16. between technical or occupational uses and popular uses
17. in aspects of action
18. between local or provincial usages and general usage.[2]

CONNOTATION OF WORDS

One of the most useful working differences between words comes about because of the fact that a word *denotes* and *connotes*. The *denotation* of a word *is its literal meaning as a writer finds it in the dictionary.* Usage adds something real but intangible, an overtone, an emotional pattern which is implied in its use. This quality of a word—its "added" meaning in context, its connotation—is clearly illustrated in the dual usage of the word "hang": "If we don't hang together, we shall hang separately."

The connotations of words, with their vivid and emotional aura, have practical consequences. Public accountants have discovered, as Jennie Palen has pointed out, that words and phrases with unpleasant connotations—"error," "mistake," "wasted time," "shortage," "carelessness," "inefficiency," and "refusal"—can become fighting words. Criticism in reports,

[2] *The American College Dictionary* (New York: Random House, 1947), p. xxviii.

accountants know from experience, are welcomed when they dwell "on the cure rather than on the crime." By choosing words with the right connotation, auditors may approach the problem tactfully and thus pave the way to the solution. They use words which have positive rather than negative connotations and thus avoid causing irritation. Instead of writing:

Too many accounts are carried in one ledger, and, as a result, a great deal of time is wasted in looking for errors at the end of the month.

the experienced and tactful accountant, aware of the connotation of words, says:

Much of the checking incident to balancing can be avoided if the accounts are divided into several sections with a controlling account for each section.[3]

The International Union, United Automobile, Aircraft, and Agricultural Workers of America, CIO, as a part of its trade union educational activities points out to its members that words can "convey meaning" and that they "can also convey feeling." In its effective letter-training program the New York Life Insurance Company emphasizes the fact that words evoke emotional response. A clerk wrote this letter:

Dear Mr. Blake:

We *cannot* comply with your request of March 4 for a health conservation examination. In rejecting your request we should like to point out that we *never* give such examinations since we are *prohibited* by law from doing so.

The letter creates an unfavorable emotional effect by the use of such words as "cannot," "rejecting," "never," and "prohibited." "Can you imagine," asked the New York Life Insurance Company Public Relations Department, "how Mr. Blake felt about the company after reading this letter? Not only is the over-all emotional effect completely negative but the writer (and thereby the company) has been defensive, abrupt, and downright discourteous." The supervisor substituted positive for negative words and rewrote the letter to read:

Dear Mr. Blake:

We always *appreciate* an *opportunity* to be of *service* to our policyholders. It is with regret, therefore, that I must tell you that the company does not offer health conservation examinations.

The reason for this is that most people who desire such an examination *naturally* expect diagnosis and advice. This might be construed as the practice of medicine which, by law, we are not permitted to do.

I *hope* you will give us a *chance* to be more *helpful* to you another time.[4]

[3] Jennie M. Palen, "Pointers on the Technique of Writing Audit Comments," *New York Certified Public Accountant*, February 1951, p. 84.

[4] *Effective Letters* (New York: New York Life Insurance Company, 1951), pp. 13-16.

From these illustrations it can be seen that some words arouse an emotional reaction. The New York Life Insurance Company explains that "some words will affect you agreeably and that others will not. You will like some words, you will dislike others. And still others may have no emotional effect on you at all." The company uses the phrase *plus words* to describe words which people like and *minus words* to describe those which people do not like. To demonstrate how certain words have a personal, emotional power to make people "feel" positively or negatively, one need only take the pencil and put a plus or minus sign after the words in Figure 9.2 as they affect him.[5]

A General Motors Corporation engineer submitted a report manuscript with a foreword which read like this:

> The power output of the ABC engine is far below what an engine of its size should be capable of producing.

The critical and negative connotation of the statement rubbed the ABC engineer the wrong way. When the sentence was redrafted in a more diplomatic and factually exact wording it read:

> The ABC engine was originally designed with endurance and smoothness as the primary considerations. To obtain these features with a proper consideration of the remaining factors of performance, the specific power output was purposely held rather low.

This statement, being both truthful and courteous, inspired confidence in the rest of the report.

Opposite each word in the following list write down your immediate reaction to it. If you like the word (if you think it is a good word), make a plus sign after it. If you do not like it, mark it with a minus.

abandoned ______	disaster ______	negligence ______
ability ______	distinction ______	oversight ______
admirable ______	effective ______	premature ______
apology ______	extravagant ______	sketchy ______
authoritative ______	fault ______	substantial ______
biased ______	fear ______	unfair ______
blame ______	fraud ______	untimely ______
benefit ______	faith ______	useful ______
commendable ______	insolent ______	wise ______
complaint ______	initiative ______	weak ______
confidence ______	loyalty ______	wrong ______
death ______	long-winded ______	

Adapted from EFFECTIVE LETTERS *(New York: New York Life Insurance Company, 1951), pp. 8-13.*

Fig. 9.2. Example of plus and minus words

[5] *Ibid.*, pp. 8-9.

"MAP" AND "TERRITORY"

A word, it can be seen, evokes an image of something which the mind conceives to exist in the real world. This picture-of-the-world exists as a result of experience in communication. The images which the words evoke in the mind become the actual world in which the person lives. When the word and its image in the mind accurately describe the objects and relationships with their qualities in the real world, then understanding is clear and the process of communication is exact. If, on the other hand, the pattern in the mind does not accurately describe the object, it can be misleading and condemn a person, as far as that image is concerned, to live in a partially false world. The situation is like that which would exist if a motorist followed an inaccurate map; he would come to the wrong destination because the map did not correctly describe the territory to be traveled.

In recent years the study of the science and meaning of words has developed rapidly. Specialists in the subject are called "semanticists." "Semantics," as the study of the science and meaning of words is known, makes much use of the two terms "map" and "territory." *Territory means the real object in the external world. Map means the conception in a person's head of what the real world is like.* It exists as a configuration of meaning. Confusion in thought arises when words used to describe "territory" fail to awaken a common pattern of meaning. When James Brown and his wife, Anna, signed a memorandum acknowledging receipt of fifty dollars from John and Michael Hurley in part payment for "*a* house and lot situated on Amity Street, Lynn, Massachusetts," they were talking about their own home. But when James Brown died, Anna Brown attempted to keep possession of the house and lot on the grounds that the words "*a* house and lot" in the memorandum did not specifically describe the location. There were many houses and lots on Amity Street, the widow argued. Within the context of the agreement nevertheless, the court ruled that "a" meant "my" and rendered judgment for the Hurleys.[6] Writing, it is obvious, must be clear so that one cannot only understand; it must be so clear that one cannot misunderstand.

SEMANTIC CONCEPTS

Attention needs to be given to a few representative concepts to show how they can be used to help make ideas clear. The subject is a broad one and should be followed up by the readings suggested at the end of the chapter. Industry has found the subject of semantics to be very practical indeed. The International Union, United Automobile, Aircraft, and Agricultural Workers of America, CIO, issues pocket handbooks and study manuals entitled *Semantics for Shop Stewards* and *How They Lie Scien-*

[6] Hurley v. Brown, 98 Massachusetts 545.

tifically. In its training program the New York Life Insurance Company gives detailed attention to the application of semantics and what it calls the "humanics" of language. An iron foundry holds classes for supervisors and foremen with the study of semantics included as a unit of instruction. The science of semantics has established itself as a branch of knowledge with practical applications at the shirt-sleeves level of industry.

The discussion which follows deals with seven semantic concepts referred to as (1) abstracting, (2) dating, (3) directive language, (4) indexing, (5) orientation, (6) ritualistic language, and (7) slanting.

1. Abstracting. Words are *specific* and *general.* As the mind moves from the concrete to the class of objects of which the concrete is but one example, it generalizes. By *leaving out characteristics* the mind can include more and more concrete instances in a single category. Semanticists call this process of leaving out characteristics *abstracting.* The writer is constantly climbing the ladder from the specific to the general and descending from the general to the specific. Awareness of the process of abstracting is important to the writer. Manipulation of words in the process of abstracting and generalization, in fact, can lead to a lawsuit, as the analysis of the action of Hurley against Brown in the courts of Massachusetts (Figure 9.3) makes clear.

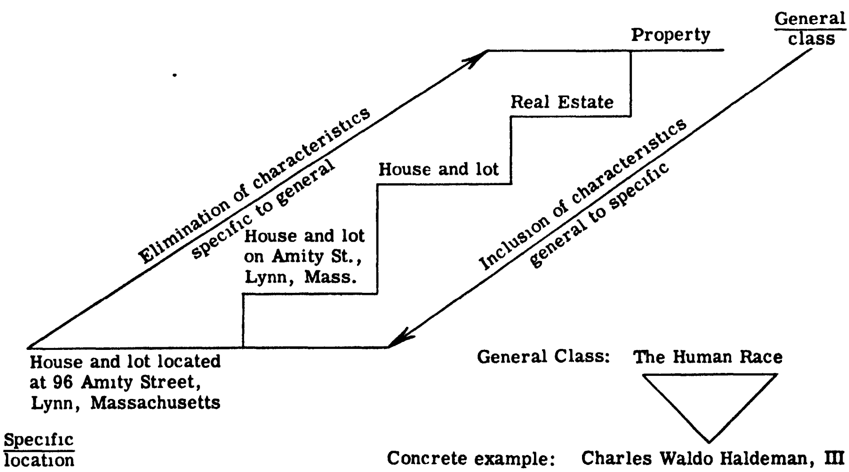

Fig. 9.3. Steps in process of abstracting: from specific to general

2. Dating. The study of semantics also helps the writer make his ideas clear by calling attention to the technique of *dating.* Events, persons, and objects exist in time; they also change with the passage of time. When time is an important factor, dating gives a sharper distinction to the communication process. The writer needs to say *when* a statement was made, *at what time* something happened. The Anglo-Iranian Oil Company 1956

became an entirely different organization from the Anglo-Iranian Oil Company 1934. A congressman making a speech in Chicago condemned the Soviets. When confronted with a statement which he had made favorable to Russia, he asked his heckler:

> "When did I say that?"
> "In 1943," answered the heckler.
> "That's right," said the congressman. "In 1943 the United States and the Soviet Union were allies in war."

Russia 1956 was not Russia 1943.

3. Directive language. A third concept used by the semanticist refers to words which influence and control future events—*maps of territories-to-be.* Advertising men urge their wares, the parson preaches eternal life, the politician promises to reduce taxes, the judge sentences the thief to prison, Mother tells Johnnie to run to the store and get some bread. *Language controls behavior; it influences future action.*

4. Indexing. By "indexing," the semanticist means the identification of individual persons and things within a general class. A firm in 1930 established a uniform vacation policy allowing three weeks to all staff and employees. An officer of the firm reported to the president:

> Our vacation (3 weeks) now, I understand is not exceptional. It was when instituted—no longer is. I think we have several alternative plans to choose from. Here are some to start the ball rolling:
>
> 1. Four weeks for everybody.
> 2. Four weeks for everybody, but no more than three weeks in a row for anybody (in fact, some places make it mandatory that one week of the four be taken during the winter months).
> 3. Four weeks for everybody as a basic vacation time, but for the Policy Committee members and departmental heads and key personnel the following schedule: 8 weeks of work and then 1 week off. Accumulation of no more than 2 weeks for these people, however. This comes to a little over 5 weeks vacation for key personnel. This one's on the theory that key people can't be spared for more than two weeks running, but they also get a hell of a lot more tired, and their efficiency will be increased by regular periodic times off.
> 4. Four weeks for everybody: two weeks mandatory in winter; two weeks in summer.
> 5. Three weeks for everybody but key personnel; four weeks for key personnel.
> 6. Three weeks for everybody.

When the vacation plans are "dated" it is discovered that Vacation Plan 1930 is not as satisfactory as Vacation Plan 1955. If a writer indexes, he no longer deals with just *a* vacation plan uniformly applied to *all* personnel.

He finds that he is discussing vacation *plans,* plural. He is thinking about six different vacation plans:

V_1 . . . 4 weeks for everybody

V_2 . . . 4 weeks for everybody, but no more than three weeks in a row for anybody
and so on down to

V_6 . . . 3 weeks for everybody.

This method of indexing to distinguish among units within a class helps a writer to identify the exact thing he is talking about.

5. Orientation. Semanticists use the concepts of *two-valued* and *multi-valued orientation.* The former concept refers to the human tendency to make judgments on the basis of two mutually exclusive values such as good and bad; the latter explores the possibilities on the whole continuum between the mutually exclusive extremes.

A superintendent made this report to his boss:

> *Couch in the Girls' Room:* If it would fit, I see no objection to it. I've always wondered, though, why they never had such things in men's rooms too. It's part of the "women are fragile" myth, I'm afraid.

The problem was stated as *two-valued orientation*—either a couch or no couch at all, the decision depending upon the mechanical problem of whether the existing couch would fit the space. A *multi-valued approach* to the couch problem would have been to study the need for the couch. Perhaps the plant required more than one couch. Or perhaps some of the employees needed medical attention. Or perhaps some particular types of work were too strenuous for long periods of concentration.

6. Ritualistic language. A good many of the words people use are threadworn recitations and reiterations of emotionally-toned verbal formulas which cast a spell of finality over the discussion. Implicit in rituals which sound so familiar to the ear is the sanction of some group and the feeling that the words are supported by some law of the universe. The Communist speaks of the "system of exploitation by which peoples have been enslaved and robbed throughout the centuries." If a writer is on the watch, he will catalog a long list of ritualistic language which communicates nothing new and directs its words toward vague and intangible referents. He wants to avoid this kind of lingo.

7. Slanting. By this term semanticists refer to favorable or unfavorable details selected for their power to lead to a bias on the issue discussed. A writer can avoid bias not merely by an honest objectivity but also by presenting the pros and cons of a debatable proposition and then basing his own position on sound reasoning.

SPEECH LEVEL PITCHED TO AUDIENCE

Words men use, like the clothes they wear, are appropriate for some occasions and unsuited for others. A husband would wear neither a white tie nor overalls to church. A woman would not dress in a kitchen apron to attend a formal dinner or shop at the supermarket in an evening gown. *Language, like dress, has codes of appropriateness for particular purposes.* Just as clothes are classified as formal and informal, words are classified by the levels of their usage as

1. *formal literary English*
2. *colloquial English*
3. *illiterate English*

In planning a report a writer must decide the speech level on which he is going to write—whether in formal literary or in colloquial English. Once he has chosen his level, he must stick to it consistently throughout his manuscript.

In formal literary English the United Business Service explains how to use its weekly reports to increase business and investment profits. It says:

DECIDE YOUR OBJECTIVE

The first step in planning your investment program is to appraise your present investments and decide upon the type of account best suited for your purposes. The following are the three broad classifications of accounts into which most investors' requirements fall:

SPECULATIVE ACCOUNTS—Here profit is the primary aim.

BUSINESSMEN'S ACCOUNTS—This classification is less speculative than the first. As the name implies, risks are considered to be about the same as those assumed in an average business operation.

INVESTMENT ACCOUNTS—This type of account is designed for stability and income with a minimum of risk. Commitments are normally in investment-grade stocks and bonds.

Archie Comic Publications, in the level of speech appropriate to its kind of business, reports to worried advertisers about the impact of television on comics readership. In colloquial English it says:

We could "fancy" this presentation up—
but since you want FACTS—
not tricky charts and bombastic
statements—
here's the story—NET.

In guiding people to invest their money, a writer does not use the same level of English that he works on to sell advertising in comic magazines.

WHY TECHNICAL COMPOSITION IS GOOD WRITING

In addition to the literary and colloquial levels of usage, a writer on a proper occasion uses technical language. If one analyzes technical composition, one discovers that the qualities which make it good writing are (1) exactness of symbol in pointing to its referent, (2) concreteness of nouns,

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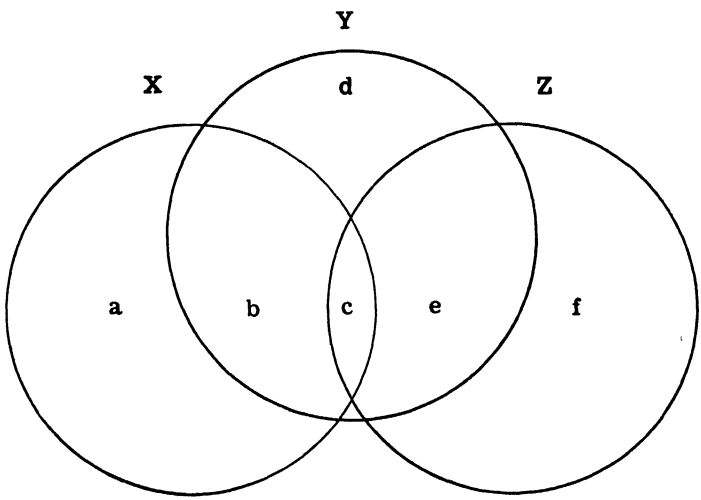
Language Habits Classified According to Degrees of Dignity and Situations of Use. *



X—formal literary English, the words, expressions, and structures one finds in serious books

Y—colloquial English, the words, the expression, and the structures of the informal but polite conversation of cultivated people

Z—illiterate English, the words, expressions, and structures of the uneducated

b, c, and e—overlappings of the three types of English

c—that which is common to all three; formal literary English, colloquial English, and illiterate English

b—that which is common to both formal literary English and colloquial English

e—that which is common to both colloquial English and illiterate English

a, d, and f—those portions of each type of English that are peculiar to that particular set of language habits.

* *Adapted by courtesy of the publishers from* THE AMERICAN COLLEGE DICTIONARY, *copyright 1947 by Random House, Inc. (textbook edition by Harper & Brothers).*

Fig. 9.4. Speech levels

(3) action of verbs, (4) descriptive power of nouns, and (5) the use of adjectives *only* to achieve precision in statement. Study this sentence:

1.	**Exterior**	adjective for precise statement only
2.	**inspection**	noun describing what was done
3.	**disclosed**	action verb
4.	**serious**	important qualitative adjective
5.	**brick**	concrete adjective
6.	**disintegration**	noun describing process
7.	in the	
8.	**north and east**	adjectives for precise identification
9.	**walls.**	

Take another example:

1.	**Treatment**	noun describing process
2.	**with**	preposition introducing
3.	**hydrochloric acid**	concrete noun
4.	**left**	action verb
5.	a **residue**	concrete noun
6.	**of**	preposition introducing
7.	**0.7 per cent**	exact quantitative noun
8.	probably consisting of **corundum.**	concrete noun

Excellent though its nature, technical reporting can easily fall into insipid statement characterized by the use of the passive voice and forms of "to be" as verbs. When statement moves beyond the purely technical vocabulary, it often becomes vague, unfocused, and weak.

Here is a passive construction which could easily be stated in the active voice:

Attempts to prepare a more basic hydrate were unsuccessful.

Rewritten in the active voice it reads:

Attempts to prepare a more basic hydrate failed.

Here is another passive construction:

A number of anhydrous barium aluminates are reported in the literature, but only three may be considered definitely established; namely, 3 $BaO.Al_2O_3$.

Rewritten in the active voice, this sentence reads:

Although literature reports a number of anhydrous barium aluminates, only 3 $BaO.Al_2O_3$, and $BaO.6Al_2O_3$ stand as definitely established.

The writer has saved six words.

RESCUE OF TECHNICAL STATEMENT FROM JARGON

In writing reports on technical subjects for general reading the writer faces his most difficult assignment. Thinking today becomes more exact and more technical at the same time that need for widespread understanding is most urgent. The egg man must understand government regulations. The mother must know the fundamentals of defense against atomic attack. The farmer must understand the uses of artificial insemination. Mr. Average Man needs to understand and to use what Mr. Technical Man knows. The translation of technical and specialized language into everyday speech becomes a most important task of the report writer. A general report must speak to the general audience; the report writer must write "into" heads and not "over" them.

Technical language can often be restated in language which the layman can understand by giving the technical words an everyday meaning. Take the following example:

TECHNICAL	*EVERYDAY*
Vitamin A is a fat soluble compound, the function of which is concerned with the maintenance of the epithelial structures of the body and the preservation of normal physiology in the eye. The carotenes which constitute the chief precursors of the vitamin A of normal human nutrition are formed in plants and must be converted by the body into vitamin A before they become available either for immediate nutritional needs or for storage in the body. Certain animal products are excellent sources of free vitamins.	Vitamin A helps to protect against infection. A is one of the vitamins needed for growth and for healthy teeth, bones, and nerves. Vitamin A is important for good skin and good linings to nose, mouth, and organs throughout the body. You get vitamin A by eating ripe yellow and green vegetables and some red ones—tomatoes, for example—also from liver, butter, and eggs. Bright colors in food are often, though not always, like flags signaling with yellow, green, orange, or red, "This way for vitamin A."

Professor I. A. Richards shows how to take a difficult passage from a philosophy book and translate the technical jargon into basic English. A paragraph from page 94 of Ralph Barton Perry's book, *Shall Not Perish from the Earth*[7] reads:

> There can be no doubt of the profound antithesis between totalitarianism and the traditional creed of Americans. As these four ideas, uniformitarianism, anti-intellectualism, tribalism, and technologism, give meaning to totalitarianism, so do their opposites define democracy, as a whole composed of individualism, rationalism, universalism, and moral purposiveness.

[7] New York: Vanguard Press, Inc., 1940.

Professor Richards translates this technical lingo into an understandable version which reads like this:

> There will be no doubt that "totalitarianism" is the very opposite of those ways of belief and of living which have been handed down to us from the American past. Four ideas together make up "totalitarianism." They are:
>
> 1. *Uniformitarianism*—the idea that all *men are as completely the same* as possible, in the interest of society
> 2. *Anti-intellectualism*—the idea that men are to be guided through their uncontrolled feelings, and chiefly through their desires, hates, and fears, not through thought and reason
> 3. *Tribalism*—the idea that the group is to be given the belief that they are somehow all of the same blood, a better blood than any other, and that it is right for men of this higher blood to have power over all others
> 4. *Technologism*—the idea that power, especially machine power and control of natural forces, is the great end, and that man is the servant of power.
>
> The opposites of these ideas together make up democracy. They are:
>
> 1. *Individualism*—the belief that man's *end* or *good* (the thing for him to go after) is to become *as completely himself as possible*, with the fullest development of all his powers in all the ways that will let him get on with other men for his good and their good as men living together in society
> 2. *Rationalism*—the belief that thought and reason—not feeling or desires—are the right guides for man in all his decisions
> 3. *Universalism*—the belief that the good of *every* man—not of oneself only or of any group, but of all men equally whoever they are—is the right end to be kept in view in all men's doings
> 4. *Moral Purposiveness*—the belief that all other purposes and all uses of power are only important as instruments in the great design of putting men into harmony with one another for their common good.[8]

USE OF PLAIN, HOMELY, WORKING WORDS

No matter what level of language usage he selects, the writer in his choice of words comes face to face with the problem of *stylish* words versus *working* words. *Working words are plain, homely, direct words that get in the harness and pull the load.* Stylish words rise above the working level with a halo of sophistication which has no place in report writing. Here are examples of stylish words translated into working words for the straight speech which report writing requires.[9]

[8] I. A. Richards, *Basic English and Its Uses* (New York: W. W. Norton & Company, 1943), pp. 124-25.

[9] Examples taken from Milton Hall, *Getting Your Idea Across Through Writing* (Washington: Federal Security Agency, 1950), pp. 18-19.

STYLISH WORDS	WORKING WORDS
accorded	**given**
aggregated	**totaled**
angle	**fish**
approximately	**about**
assist	**help**
attains the age of	**becomes** ——— years of age
at the time	**when**
be cognizant of	**know, be aware of**
beverage	**drink**
commence	**begin**
comprise	**include**
conducted	**led**
deem	**think**
dwell	**live**
effect an improvement	**improve**
feasible	**possible**
forenoon	**morning**
for the reason that	**because**
give consideration to	**consider**
hold in abeyance	**wait, postpone action**
in cases in which	
in cases of	
whenever, wherever	**when, where**
indicated	**told**
initiate	**start**
in order to	**to**
interrogate the claimant	**ask him**
is applicable	**applies**
majority	**most**
necessitate	**require**
not later than June 30, 1957	**before July 1, 1957**
on and after July 1, 1957	**after June 30, 1957**
per annum	**a year**
presently	**now**
prior to	**before**
promulgate the regulation	**issue the regulation**
provision of law	**law**
purchase	**buy**
pursuant to our agreement	**as we agreed**
reflected	**shown**
specified	**named**
subsequent to	**after**
sufficient	**enough**
transmit	**send**
under the provisions of	**under**
utilize	**use**

When a writer uses a working word in place of a stylish word, he takes the affectation and stiffness out of his style. He frees himself from the prim, starchy, fussy, spinsterish mold.

AVOIDANCE OF WEASEL WORDS

As a result of office tradition, imitation, and superstitious fear of chang(in style, many writers, and especially those in government, use wease words. A weasel word is an insipid phrase placed in a sentence to acqui the writer of any responsibility for a statement. By the use of weasel word: a writer attempts to wiggle out of a position of accountability for an obser vation, conclusion, inference, or prediction. Weasel words usually worl in partnership with the irresponsible passive voice, the subjunctive mood or the conditional tense. Here are some examples of weasel words:

It is too early to say whether . . .
It would be difficult to estimate . . .
There may be a tendency toward . . .
It would appear that . . .
It is believed that . . .

AVOIDANCE OF CLICHÉS

From the clergyman and the university president to the accoun executive, from the research director to the corporation president, writer too often use occupational words and phrases which are trite, outworn commonplace, flat, and hackneyed stereotypes. Good report writing break with the injection of provincial lingo into prose which ought to be distin guished by the thoughtful choice of words. Here are some examples o clichés:

I hope that this historic occasion will be the beginning of a new era whe this institution will come into its own.

Let's get down to brass tacks.

All things considered . . .

axe to grind . . .

at the psychological moment . . .

desire to make the world a better place to live in . . .

to make democracy live . . .

to explore every avenue . . .

a grave issue . . .

The matter is receiving our closest attention.

The writing on the wall . . .

REDUCTION OF GROUPS OF WORDS TO SINGLE WORDS

Here are some examples of economy in diction achieved by reducin; trite phrases to one good word:[10]

of the order of magnitude of	**about**
in the nature of	**like**

[10] *Ibid.,* 21-22.

along the lines of	**like**
for the purpose of	**for**
prior to	**before**
subsequent to	**after**
in connection with	**by, in, for**
with respect to	**about**
with reference to	**about**
with regard to	**about**
in the amount of	**for**
on the basis of	**by, from**
in accordance with	**by**
on the occasion of	**when, on**
in the event that	**if**
in case of	**if**
in view of the fact that	**since, because**
for the reason that	**since**
with a view to	**to**
despite the fact that	**though**
give consideration to	**consider**
have need for	**need**
give encouragement to	**encourage**
make inquiry regarding	**inquire**
comes into conflict	**conflicts**
give instruction to	**instruct**
is of the opinion	**believes**
make an adjustment in	**adjust**
is due in large measure to	**is due largely**
information which is of a confidential nature	**confidential information**

AVOIDANCE OF TRADE FETISHES

Every trade has fetish words in its vocabulary. Habitual use has developed a superstitious devotion to these clichés. Legal writing offends greatly, but efforts to simplify legal vocabulary and to reduce the volume of words proceed slowly. Some of the prolixity in legal writing goes back to the time when Anglo-Saxon speech was in its infancy and meanings were not yet crystallized. A great deal of it was contributed by the English scriveners who earned their wages by the word—the more words the more money. Veblen attributed the legacy of verbosity to a respectable status of archaism and waste, legal style being reputable because the language and structures were cumbersome and out-of-date.

In a single paragraph a judge used the word "said" 22 times. An excerpt from the paragraph will illustrate the point.

> As *said* train traveled southward the appellee knew *said* smoke would cover *said* curve in *said* highway when *said* engine reached a point on *said* railroad tracks opposite *said* curve unless *said* smoke was checked . . .[11]

[11] Butlon v. Pennsylvania Railway Company, 57 N.E. (2nd) 444.

MASCULINE STYLE

In his selection of words the writer strives to achieve masculine style. Sir Arthur Quiller-Couch points out:

The touchstone of masculine style is its use of the active verb and the concrete noun . . . What would have become of Christianity if Jeremy Bentham had had the writing of the Parables? . . . So long as you prefer abstract words, which express other men's summarized concepts of things, to concrete ones which lie as near as can be reached to things themselves and are the first-hand material for your thoughts, you will remain, at the best, writers at second-hand. If your language be jargon, your intellect, if not your whole character, will almost certainly correspond. Where your mind should go straight it will dodge: the difficulties it should approach with a fair front and grip with a firm hand it will be seeking to evade or circumvent.[12]

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TRY YOUR HAND AT THESE •

- **to become familiar with semantic concepts**
- **to use plain words**
- **to develop an awareness of trade jargon and fetishes in language**
- **to choose words carefully for accuracy of statement, clarity of communication, and positive emotional effect**

1. Write a short memorandum in which you point out as many different meanings of the word "case" as you can think of. Then explain what is meant by "context" and the clear identification of a symbol with its referent.
2. A foreign student was confused by instructions of a summer camp director. First he was given an axe and ordered to "chop the tree down." When he reported that he had completed the assignment, the director said: "Thank you, now chop the tree up." Identify the idioms. Then write a one-page explanation to the student.
3. Perform the exercises given in Figure 9.2. Then using the New York Life Insurance Company letters given on page 130 as case history material, write a memorandum on the importance of a writer's concern for the emotional effect of words.
4. An important section of an information report on the basis of which military promotions are made requires a word picture of the strengths and weaknesses of the rated officer. Here are a few sentences from reports which played a large part in the determination of careers:

   1. His drinking habits are below the minimum.
   2. His turpitude is a source of satisfaction.
   3. He conducts himself properly in sexual relations.
   4. He drinks and holds it like a good reconnaissance man.
   5. He is handicapped by coccidiodoycosis.
   6. He is a medium personality.
   7. He has bad feet, easily frozen.
   8. He tends to create the impression of unpositive personality through needless and undiscerning gentility and soft-spokenness.
   9. He combs his black hair to one side and appears rustic.
   10. He can express a sentence in two paragraphs anytime.

   From the study of these sentences, and with semantic principles in mind, write a letter to the chairman of the selection board. Point out how the language can be improved and why it ought to be improved in fairness to the candidates for advancement. Explain your suggestions by reference to specific points cited in this chapter.
5. A state bar association is preparing to issue a professional bulletin for wide distribution on the subject "Your Lawyer—What He Means to You." You are asked to give an opinion on the appropriateness of the language for general audience reading. You select the following representative paragraph for comment.

WHY ARE LAWYERS NECESSARY?

In order to protect the welfare of citizens living in a community or a state, hundreds of laws covering every form of human activity must be adopted and enforced. Without these laws, it would be unsafe to venture upon a highway, to purchase food or medicine from a store or do many other things that are necessary to our daily living.

It is impossible for anyone to know the meaning of all of these laws and to keep up with the changes which constantly occur unless he devotes his full time to studying and working with these laws; therefore, it is essential to a community that some of its citizens be lawyers who are skilled in this important activity, in order that they may advise others as to their rights and handle matters for them requiring a specialized knowledge of the law.

By the use of Gunning's "fog index" and principles discussed in this chapter, write a letter to the Association giving your analysis of the passage. Attach to the letter a redraft which you have prepared to show how the readability of the manuscript can be improved.

6. The metaphor and simile are useful to the report writer. The metaphor is a figure of speech which attributes the characteristics of one object or being to another.

   The sun smiled upon us.
   All the sailboats were wagging their masts.

The simile is a comparison of relationship between two things in kind rather than in degree. A good figure of speech is fresh, appropriate, and original. It makes a sentence sparkle and clarifies meaning. Here is a passage containing two similes:

This low regard for conferences seems to stem from one or the other of two contradictory views which hold that

(1) Conferences aren't as effective at problem-solving as your Aunt Minnie's ouija board.
(2) Conferences ARE effective at problem-solving, but they solve only the problems of certain suave and sinister professional conferees who manipulate a conference like the old shell game.

Note the figures of speech in this passage. Then by reference to the *United States News and World Report,* find five figures of speech, either metaphors or similes. Write a brief information report on the use of figures of speech in report writing.

7. John Galsworthy once said that idiomatic expressions possess "an unusual amount of sheer stingo." The problem of relating symbol to referent, however, becomes sometimes impossible, although almost everyone uses and believes he understands the friendly, colloquial idiom. The following passage contains many idioms. Underline each idiom. Then taking any five of them, convert them into speech which reproduces the meaning, as far as possible, but eliminates the idiomatic expression.

When Mr. West at last took the stand, his party struck a bargain. Although they had left no avenue unexplored, neither side rested on its laurels. Supporters on both sides, reading between the lines, had qualms about the

outcome and felt that the commissioners had come home with a pig in the poke. At the meeting which followed their return, the members on both sides put their representatives through their paces. All the representatives insisted that everything was open and above board. They had studied the issues to the *n*th degree and in conference had often been at loggerheads. The long and the short of it was that at first they had labored under a mistake of fact. This confused the issue and created a false impression. Both sides however had set their hearts on an agreement. They began to make headway when they took down their hair and faced up to their common problem. Then they put all their eggs in one basket and gave credit to one another. They stuck to the problem, throwing light on the situation until they arrived at the truth. They came to an understanding, met each other half way, and began yeoman service to the country much deeper than met the eye. In the end the party members on both sides realized that their suspicions were a far-cry from the truth of the situation. The members made no bones about their previous criticism; they had not minced matters, but now with the olive branch one and all were like peas in a pod.

10

SENTENCES

A GOOD WRITER KNOWS HOW TO BUILD A SENTENCE. USING WORDS WITH easy competence to express a clearly focused idea, he communicates with engaging accuracy. The sentence arranges words in phrases to convey one idea. A good report sentence communicates the most information with the fewest possible words in the easiest-to-understand form. It combines economy in diction with clarity of presentation. It is logical, lucid, attractive, and to the point.

SENTENCE WORD ORDER

Every sentence having a transitive verb is designed by the arrangement of four structural elements to form the sentence skeleton. These four structural elements are:

1. **SUBJECT** (S)—the person, thing, or idea about which a statement is made or a question asked

2. **PREDICATE** (*P*)—the verb which sets action in motion about the subject
3. **OBJECT** (*O*)—the recipient of action set in motion by the verb so that the relationship between the subject and the object is changed
4. **MODIFIERS** (*M*)—specific details which refine meaning within the sentence.

By the arrangement of these elements the writer makes every sentence perform two functions in expressing vigorously its single idea. *Grammatical form fixes the relationship of words. Logical form determines the sequence of ideas.* Word order gives the sentence its form; idea order gives it coherence. The function of the predicate-subject-object pattern interpreted in terms of word history, as diagramed in Figure 10.1, illustrates how a sentence is designed from its structural elements.

The Sentence: *Its Skeletal Design from Structural Elements*

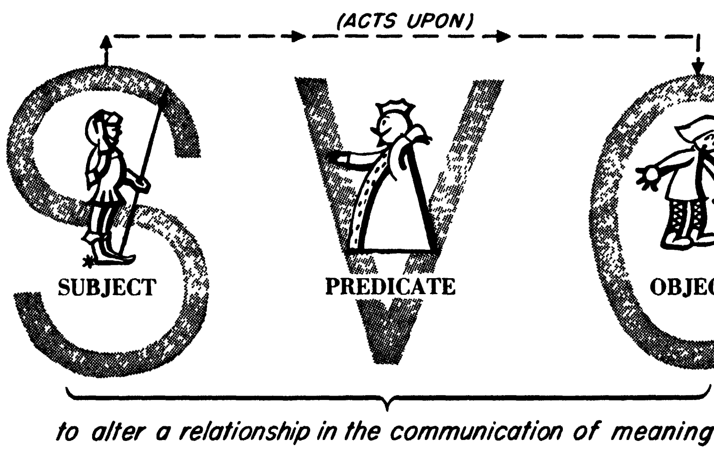


Fig. 10.1

THE SENTENCE SKELETON

Every sentence falls into one of six basic skeleton patterns. These patterns are created by the arrangement of the S : P : O : M units.

Pattern 1

S________ P________ O________ M________.

Earthenware encountered keen competition from imported china.

Pattern 2

Before deduction of federal taxes the profit exceeded $4.77.

M________ S________ P________ O________.

Pattern 3

All important over the next twenty years will be managment's emphasis on the understanding of decision-making.

O________ P________ S________ M________.

Pattern 4

O________ S________ P________ M________.

All these I have kept from my youth.

Pattern 5

P________ M________ O________.

Turn right at the second traffic signal.

Pattern 6

P________ S________ P________ O________ M________.

Do circumstances require this course of action?

TYPES OF SENTENCES

A report writer uses mostly two types of sentence: (1) the *declarative* and (2) the *interrogative*. The declarative sentence makes a statement; the interrogative asks a question.

Declarative sentence

The Glacier study states the idea that work must be accomplished *with and through human beings.*

Interrogative sentence

What finally makes a good report? The answer is "critical revision; not just a cursory reading but an honest-to-goodness, phrase-by-phrase scrutiny." Is the style of writing direct and effective? Can any deadwood, superfluous words or phrases, or irrelevant material be removed? Are the words exact and meaningful? Is the subject advanced by clear-cut logical stages? Is a good transition made from one stage to the next?

One of the most intriguing of all marketing questions revolves around "brand loyalty." Do customers purchase a favorite brand time after time or do they shop around at random? Do the type of merchandise involved and the relative strength of brands have an important influence? How many customers stay with a single brand of a frequently purchased item for a considerable period of time? Just what is a "brand loyal" customer? Can a brand develop enough consumer loyalty so that it can get a sizable share of the market from a relatively small group of steady purchasers, or must it make occasional sales to a large proportion of the families in the market?

The interrogative sentence adds strength to the flow of thought by (1) introducing variety in sentence presentation and (2) attracting attention. Its use awakens the reader to consider the answer to a question. Report

writers should use more interrogative sentences; they have an alarm-clock value.

Imperative sentence

The *imperative* sentence also helps the writer to express himself with variety and emphasis. It gives a command; it is a form of directive language.

> Avoid long words and long sentences.

LOCATION OF IMPORTANT IDEAS IN IMPORTANT PLACES

What makes an attractive and forceful sentence? One answer is the location of important ideas in important places. Every sentence has two important locations for important ideas. One of these strategic locations stands at the beginning; the other comes at the end of the sentence. To "begin and end a sentence with words that deserve that distinction" is sound advice.

Here is a paragraph written by a veteran editorial associate, yet the sentences do not locate important ideas in important places.

> It is believed that the *mediocre quality* of a great many of the reports submitted by staff members for review may be attributed in large measure to the fact that the authors have *forgotten* many of the *basic rules of grammar.* However, it is difficult for a person who has been working for ten or fifteen years and whose work has always been acceptable to understand *why* his *reports* are now considered *unsatisfactory.* Therefore it appears doubtful whether there will be any *marked* degree of *improvement* in the material prepared by members of the staff until their *attention* is *called* to the various *deficiencies and mistakes* in the reports and until remedial measures are made compulsory. In many instances, of course, the manner in which some particular aspect of a report is handled is a matter relating to policy rather than to composition.

When this paragraph is rewritten and the significant ideas are located at the beginning and the end, the sentences take an entirely different form.

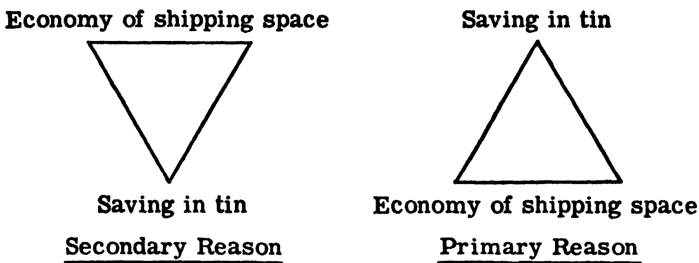
> The mediocre quality of many reports submitted for review by staff members is traceable to writers who have forgotten the basic rules of grammar. A person who for ten or fifteen years has believed that his reports are acceptable will be puzzled by sudden dissatisfaction with them. His mistakes and deficiencies must be clearly, but kindly, pointed out to him. Problems of policy and its effect upon style can be resolved, and remedial measures can then be made compulsory.

Placing of main thoughts in main clauses. Because ideas within the sentence have values relative to one another in their importance, the writer needs to express his thought to his reader by weighing these values in the order of their significance. The principle of sentence construction which guides the craftsman is this: *put main thoughts in main clauses, coordinate*

thoughts in coordinate clauses, and subordinate ideas in subordinate clauses. Take for example this sentence in which the capital letters indicate the clause which conveys the more important idea:

ALTHOUGH THE CHIEF REASON FOR THIS ATTITUDE WAS THE NEED OF ECONOMY IN SHIPPING SPACE, a saving in tin containers was also an important consideration.

Here the main idea is subordinated in a dependent clause. The ideas are turned upside down in their importance. The major need was economy in the use of shipping space, not the saving of tin. The relative values can be seen from a comparison of two triangles:



The location of the main idea changes the sentence design because in a complex sentence only one of the clauses makes the basic statement. Rebuilt, the sentence reads:

Although a saving in tin containers was also an important consideration, THE CHIEF REASON FOR THIS ATTITUDE WAS THE NEED OF ECONOMY IN SHIPPING SPACE.

To make the ideas coordinate, the writer might draft the sentence like this:

The need to economize in shipping space was one reason; the necessity to save tin containers was another equally important consideration.

VARIETY IN SENTENCE BEGINNINGS

Sentences grow monotonous unless the writer begins them with variety. Take for example the following monotonous paragraph. Each sentence begins with an anticipatory subject.

Sentence 1

There are indications that costs of both natural and synthetic rubber may be appreciably lower a decade or so after the close of the war than in the immediate postwar years.

Sentence 2

There will be further inventions and discoveries in the synthetic field, which will tend to lower costs as well as improve quality.

Sentence 3

It is possible, if not probable, that reduction in costs will be by a greater percentage in synthetic than in natural rubber.

Sentence 4

There is no way of predicting whether the synthetic will finally become the cheaper product.

Here are nine ways in which to start sentences with variety. A sentence may begin

1. *With a subject*

Basic weekly *earnings* mean straight-time pay exclusive of overtime pay and any special compensation.

2. *With a clause*

If men would only say what they have to say in plain terms, how much more eloquent they would be!

3. *With a phrase*

Through aggressive national advertising of its products, this company has built up a commanding trade position.

4. *With a verb*

Should foreign requirements exceed their productive capacity, the company will find it necessary to construct another plant in Japan.

5. *With correlative conjunctions*

Not only the rapid readjustment of assembly lines following the shutdown, *but also* the demand for new models brought a sharp upturn in employment.

6. *With an adverb*

Usually the freight cost represents from one-fifth to one-third of the wholesale factory price.

7. *With a conjunctive adverb*

Consequently the new equipment required for expanding production of these fractions was built in conjunction with existing petroleum refineries.

8. *With a verbal*

Receiving the standard Blue Shield Medical-Surgical Plan benefits, company employees will also have coverage for home and office calls.

9. *With an infinitive*

To write well, an author must be in full possession of his subject.

Perhaps a third of the sentences should begin with the subject and have the S____ V____ O sequence. Variety in the remaining two-thirds of the sentences gives strength, smoothness, and attention-value to the paragraph.

ORGANIZATION OF IDEAS IN PARALLEL CONSTRUCTION

A writer often builds strong, clear, and compact sentences by using the device of parallel construction. The principle is this: *express ideas of equal rank in a uniform style and with corresponding grammatical construction.* Items in the parallel construction should be arranged in the order of dramatic effectiveness, the least important being presented first, the most important last. By this method the writer builds his sentence to a climax.

Here are seven patterns of parallel structure.

1. *Series of subjects*

Baltimore, New York, San Francisco, and *Galveston* are ports of entry.

2. *Series of verbs*

The companies *sell* the logs on the open market, *tow* the purchased logs to the mills, and *maintain* a small supplemental supply.

3. *Series of objects*

The interwar period showed wide *variation* in prices, a steady *increase* in the numbers of stock sheep, and an *advance* in wool production.

4. *Series of prepositional phrases*

Several factors have a bearing *on* the long-term future of the industry, *on* the policy of the Company, and *on* the trade relationships with countries of the Far East.

5. *Series of infinitive phrases*

The board should have responsibility

a. to approve any proposed international arrangements regarding supply and price
b. to draw reserves from stockpiles when unusual conditions require
c. to coordinate the various parts of the program.

6. *Series of clauses*

The plan provides *that* the noncontributory life and accidental death insurance will be effective February 1

that the Blue Cross and Blue Shield will be effective for eligible dependents on March 1

that monthly charges will be deducted from pay checks.

7. *Series of independent clauses joined by semicolons*

The logs are cut in Canada; they are towed along Puget Sound; and they are delivered to mills in the Gray's Harbor and Willapa Bay areas.

In using the parallel construction a writer must guard against the common mistake of shifting his form of expression. He must stick to his parallel pattern. He must not, for example, break the parallel construction of prepositional phrases cited in sentence 4 by intruding a verb which would make the sentence read:

Several factors have a bearing *on* the long-term future of the industry, *on* the policy of the company, and *affect* the trade relationships with the countries in the Far East.

LOOSENING UP STIFF STRUCTURE WITH LOOSE SENTENCES

Just as he can classify human beings as African, Asiatic, and European, so the writer comes to recognize sentences on the basis of rhetorical effect as (1) *loose,* (2) *periodic,* and (3) *balanced.* The *loose sentence* communicates the idea in the natural order of S____ P____ O and tells the important part of the story before the sentence ends. A *periodic sentence* on the other hand holds the outcome of the sentence in suspense until the end is reached; it does not make sense until it is read all the way through. The *balanced sentence* compares or contrasts ideas expressed in about the same number of words and in the same type of grammatical form. Compound sentences are almost always loose or balanced. Complex sentences with the main clause standing at the first are loose. A sentence is usually periodic when the modifiers precede the verb.

Although the loose sentence in spoken and written English is used far more frequently than the periodic, report writers tend to reverse the normal English usage by specializing in periodic sentences. The result is a stiffness of structure which needs to be eased up with loose sentences. A writer can achieve ease in style by occasionally changing a periodic into a loose sentence or strategically placing a periodic sentence amid loose ones. The writer ought to be able to identify loose, periodic, and balanced sentences and to use them to achieve the strongest rhetorical effect.

Loose sentence

Systematic errors may arise because of procedural rules which entail faulty classification.

Periodic sentence

The notion common to all treatments of productivity is the relation of human input to output.

Balanced sentence

Man thus controls nature. He controls nature by working upon it, and he controls it by fashioning tools which make it easier to make things.

SENTENCE LENGTH AND PARAGRAPH RHYTHM

How long should a good sentence be? Grammarians differ in their opinions about optimum sentence length. Rudolf Flesch thinks a seventeen-word sentence ideal.[1] Porter Perrin feels that sentences averaging less than

[1] Rudolf Flesch, *The Art of Plain Talk* (New York: Harper & Brothers, 1946), pp 39-40.

twenty words and more than thirty should be studied.[2] While Perrin sees no special virtue either in long or in short sentences, he warns that sentences of less than twenty words should be evaluated to see whether details have been properly built into mature expressions: sentences with more than thirty words should be studied for the appropriateness of material included and the clarity of the communication. Robert Warnock suggests that the consistent use of sentences with less than eighteen words indicates a tendency to miss connections in ideas, to build each detail

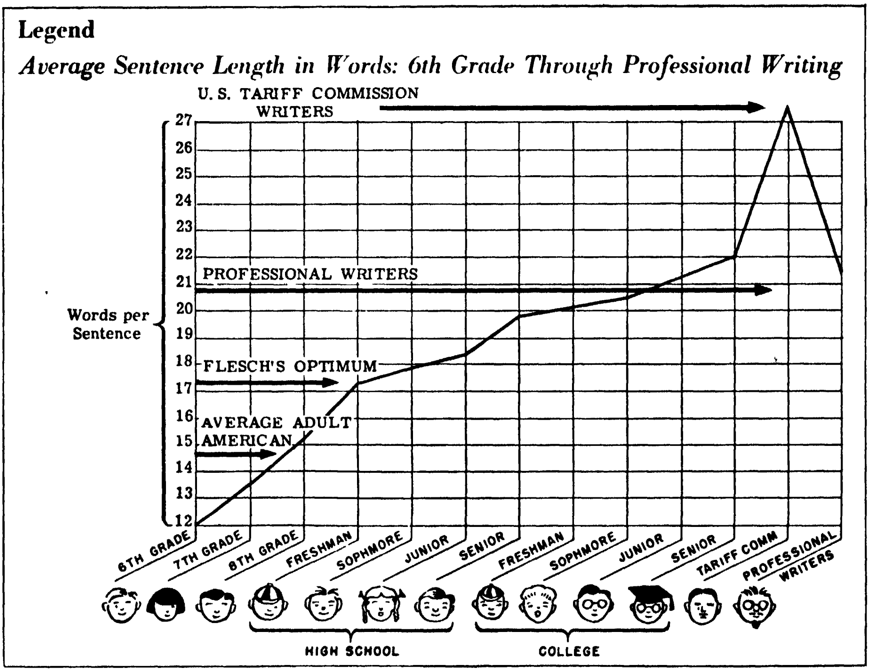


Fig. 10.2

into a separate sentence.[3] When a sentence exceeds forty words, Warnock thinks the construction may reveal loose and aimless thinking. In any case, sentence length tends to vary directly with educational level of the writer as Figure 10.2 shows. Use of long sentences can become an occupational disease. When it does, writers must struggle with themselves to simplify their habits of expression.

Of course there is no fixed quota of words for the ideal sentence. If the

[2] Porter G. Perrin, *Writers Guide and Index to English* (Chicago: Scott, Foresman & Company, 1942), pp. 154-55.

[3] Robert Warnock, Porter G. Perrin, Earl F. Ward, and Harrison Platt, Jr., *Using Good English* (Chicago: Scott, Foresman & Company, 1944), pp. 99-100.

ideas in a long sentence go logically together with clear, accurate connections, long sentences may reflect mature thinking and writing. It seems clear from this brief discussion that there is no one formula for a good sentence. *A good sentence is one which communicates an idea attractively and lucidly.* The question is not whether the sentence is long or short; it is whether the sentence is clear and beats to the rhythm of the paragraph. To build an attractive paragraph the writer needs sentences of all lengths and types to achieve optimum effectiveness. Sentences can be short and bad; they can be long and good; and they can also be long and bad.

SENTENCE VERB POWER

VERBS ACT UPON SUBJECT TO CHANGE RELATIONSHIPS WITH OBJECTS

Thought in sentences flows through the subject-predicate sequence. The verb sets the action of the sentence in motion; the strong predicate, like an engine, propels the idea. It preaches; it exhorts the subject to action against the object. The word-history of predicate, as Figure 10.3 shows, makes this observation even clearer. The word "predicate" combines the Latin prefix *prae* with the infinitive *dicare* meaning "to make known." Remember this: *strong motivating verbs produce masculine sentences.*

ACTIVE VOICE STRONGER

Strong sentences tell their story in the active voice. Something does something to somebody. Weak sentences, written in the passive voice, reverse the action of the sentence: meaning moves backward. The subject rather than the object becomes the recipient of the action set in motion by the verb. Frequent use of the passive voice deadens the flow of thought and kills the drama which belongs to he-man sentences. Take a few examples of sentences written in the passive voice, then convert these sentences into the active voice.

Passive

A study of silicosis *was made* by the Public Health Service in the state of West Virginia.

Active

The Public Health Service *made* a study of the prevalence of silicosis in the state of West Virginia.

Passive

In an amendment, sweet potatoes and carrots *were removed* from the list of dehydrated vegetables.

Active

The amendment *removed* sweet potatoes and carrots from the list of dehydrated vegetables.

Passive

Shelf life *has been prolonged* by more careful methods of packaging.

Active

More careful methods of packaging *have prolonged* shelf life.

and

The passive voice not only makes sentences weak; it blurs meaning.

Study this example:

During the entire war there was shipped to the United States Army . . .

Who did the shipping?

The use of the passive voice actually is a bad habit; a very simple operation transforms the verb to the active voice. Like all general rules, however, there are exceptions to this statement. The use of the passive voice sometimes adds to informality and provides variety.

INTRANSITIVE VERBS WHICH SUFFOCATE MEANING

Just as a dead-end street halts traffic, the intransitive verb which does not pass over to an object suffocates meaning. Because the meaning of an intransitive verb is complete in itself, it alters no relationship between subject and object. It provides no "forward march" order in the sequence of thought.

Forms of the verb "to be" are weak. As a rule, the more frequent the use of this verb, the poorer the writing. Yet it has its necessary uses. A writer should know *why* and *when* to use this verb. First of all, "to be" joins the subject to the subjective complement. Being a weak verb, however, it does not express action or convey motion through subjects toward objects to alter meaning. "To be" is also a verb of complete predication. It affirms directly a state, position, or existence. As such a verb, its use is necessary, especially in stating definitions and fundamental propositions. When it completes predication a substitute verb can rarely be found.

The misuse of "to be," so common and disastrous to strong writing, comes when one of its forms is lazily used in place of a vivid, motivating verb. This example illustrates the point:

The principal distinction between two types of pottery *is* that china is translucent, whereas earthenware *is* opaque.

A writer might better say:

The translucence of china distinguishes it from opaque earthenware.

AVOIDANCE OF THE "AND IS" CONSTRUCTION IN SIMPLE SENTENCES WITH COMPOUND PREDICATES

"And is" makes a weak construction. Take an example:

The contractor pays for the materials and labor used in the various processes *and is* the owner of the resultant product.

Recast to eliminate the "and is," the sentence reads:

Since the contractor pays for the materials and labor used in the various processes, he becomes the owner of the resultant product.

The contractor pays for the materials and labor used in the various processes; consequently, he becomes the owner of the resultant product.

SENTENCE SIMPLIFICATION

ECONOMY IN THE USE OF PREPOSITIONS

Prepositions introduce qualifications in thought. By adding detail, they weaken general ideas in terms of which the average man thinks. While qualification makes an idea more precise, it also makes meaning more complex. The grammatical function of a preposition is to make the noun or pronoun it governs into a modifier. The preposition thus becomes a form word. Form words show relationship but present no specific idea to the mind, as content words do.

Here is a sentence of 52 words with 12 prepositions—one for almost every four words:

Processors were also released *from* the restrictive provisions *of* the order (1) *on* sample lots not exceeding 25 pounds *for* research and experimental purposes; (2) *on* lots needed as essential ingredients *by* manufacturers *of* dehydrated soups *in* filling military contracts; and (3) *on* lots shipped *after* July 1 *to* civilian food manufacturers having quotas assigned *to* them.

The revised sentence adds strength by eliminating many of the "form words."

The directive released processors from the restrictive provisions of the order in these classifications:

1. sample lots not exceeding 25 pounds and used for research and experimental purposes
2. lots essential to supply military contracts with dehydrated soups
3. lots shipped after July 1 to civilian food manufacturers having quotas.

The number of prepositions is reduced to seven.

A writer can reduce the number of prepositions by:

1. using an active rather than a passive verb
2. using a participial phrase
3. using parentheses
4. tabulating
5. starting a new sentence.

ECONOMY IN PREDICATION

Verbs take action against their subjects and alter the subject's relation to the object. A sentence is therefore stronger when its action is limited to the fundamental verb. Writing today reduces predications and prefers fewer clauses and verbal modifying statements. A good writer reduces predication by taking his pencil and striking out unnecessary verbs.

Here for instance is a sentence of 35 words:

The manufacturers' fear *was* that if stocks *became* low, speculators *would enter* the market on a large scale and the price *would be* rapidly *pushed* upward despite anything that the committee *might try to do.*

The sentence contains five verbs in five clauses in a complex sentence containing five interlocked subordinated clauses. When the sentence is recast to reduce predication, it reads:

Manufacturers feared that low stocks would attract speculators and start a rapid rise in prices, despite any action by the committee.

The sentence is now simple and 14 words shorter. It has no dependent clauses. By eliminating the intransitive verb "is" and making the verb take action against the subject in terms of the object, the sentence is strengthened. "Fear" has been transposed from a noun to a major verb. A conditional clause has been turned into a compound verb. A subordinate clause has been designed into a prepositional phrase. Still another subordinate clause has been organized into a logical sequence with the condition expressed by the verb "feared."

These then are some of the means of reducing predication:

1. by changing verbs into nouns
2. by changing nouns into verbs
3. by reducing a clause to a phrase or word
4. by reducing a clause to a verbal.

Sentences are strongest when one major verb remains sovereign over the action of the sentence.

REDUCTION IN THE NUMBER OF CLAUSES

Subordinate clauses simplify and qualify the main ideas of the sentence. Just as economy in predication may reduce the number of verbs used, so

the systematic reduction of the number of subordinate clauses may strengthen grammatical structure in the interest of economy in diction. Clauses may be reduced in number:

1. by using compound subjects 2. by using compound verbs	*substitute for clauses having the same verb or subject*
3. by using verbals 4. by using prepositional phrases	*substitute for subordinate clauses*
5. by using appositives 6. by using absolute phrases	*substitute for almost any clause by changing a verb to a verbal*

BREAK UP OF CHAINS OF NOUNS

Often in technical writing, scientists, in their determination to be precise, string a series of nouns together in a way that confuses the reader. This habit of complicated statement probably comes from the scientist's wish to include all necessary qualifications. Sometimes it is a result of the influence of the German language, in which thoughts can be built up into a very long word. Miles J. Martin, editor of technical reports at the General Electric Research Laboratory, finds the chain of nouns to be a difficulty requiring constant editorial attention. He cites as an example:

> Such action occurs when aluminum alloy components contact parts made from other metals in the presence of an active electrolyte. Such bimetal functions are commonly encountered in assembled electrical apparatus.

In this sentence the verb "contact" on first reading seems to be a part of the string of nouns. The sentence structure is too dense for easy comprehension.

The burdensome qualification given in some scientific writing is caused, as one science editor sees it, by the desire of the writer to "assure Professor X that he has taken into consideration all possibilities." Dr. Martin tells his General Electric colleagues that "good writers recognize the unimportance of the unimportant." They know what to leave out as well as what to put in.

SENTENCE PATHOLOGY

Any writer can improve his sentences by (1) eliminating anticipatory subjects, (2) abolishing the snub-nosed sentence, and (3) relocating causal adverbs.

ELIMINATION OF THE ANTICIPATORY SUBJECT

The anticipatory subject introduces a sentence with a series of meaningless words; the real subject follows the verb. The use of the anticipatory subject, so dear to the heart of some report writers, delays action in the sentence and multiplies the number of words necessary to communicate an idea. Take these examples:

There are indications that costs . . .

It will be seen that in the Northwestern region . . .

It appears also from the above table that . . .

There has been in recent years a rapid expansion . . .

It is estimated that the total stand of . . .

It is necessary to build new facilities and . . .

It is obviously impossible, however, to forecast what, if any, measures will be taken or what will be the general economic situation of . . .

Observe how much more effectively a sentence tells its story when, eliminating the anticipatory subject, the writer fortifies its strategic position with important ideas and says to his reader:

To forecast what measures will be taken or what the economic situation will be after that date is impossible.

SNUB-NOSED "IT WAS" SENTENCE

The snub-nosed sentence begins with an anticipatory subject composed of a neuter pronoun and a form of "to be." Like a kickoff when the ball bumps end over end instead of taking flight to the opponents, the snub-nosed "it was" sentence fails to start the communication game with excitement. Take a few of the endless examples:

It should be noted that the amortization costs are overstated.

It is not likely that the annual demand will exceed sixteen million boxes.

It is evident from the description that the machine-cylinder process is a great advance over the hand-blown process.

It is planned to complete the changes by spring.

It is expected that this transfer will begin late in the year.

It is noteworthy, however, that for plants reaching or exceeding the rated capacity the actual costs compare favorably with the estimate costs.

RELOCATION OF CONJUNCTIVE ADVERBS

Conjunctive adverbs too often occupy the strategic location at the beginning of a sentence. Examples abound in reports:

However, by quantity the proportion of imports was larger than by value.

Furthermore, the committee took little or no account of progress that was being made.

Consequently, there was an immediate expansion of the industry.

Thus, the idea of attempting to negotiate a new agreement has for the time being been abandoned.

In consequence, receipts from the sale of wool have formed a higher proportion of total flock receipts in periods when the general price index is high than when that index is low.

Moreover, unless the stocks acquired were released almost immediately, they would hang over the market like a sword of Damocles.

Actually, however, this might be difficult to determine.

Nevertheless, it is necessary for present purposes to assume—as stated earlier—that, once the full impact of competition . . .

A good writer

1. *commands the important sentence locations by the use of important words*
2. *does not surrender strategic positions to adverbs*
3. *recaptures the strategic beginnings and endings by relocating adverbs and insignificant words and phrases inside the sentence*

Here is an example:

It is to be expected, however, that with further experience, the blend will be improved and ultimately types may be produced which are equal to natural product even for the uses in which the latter *is now definitely superior.*

Here two ideas of no importance occupy the strategic positions at the beginning and the end of the sentence. A long anticipatory subject commands the opening; a relatively unimportant modification guards the end with insignificance. The idea of the sentence is simply this: A blend may some day be produced as good in quality as the natural product. The good writer takes that idea, commands the strategic positions, and says to his reader:

Improvements in the manufacture of the blend may produce a line equal in quality to the natural product.

ORPHANED DANGLING MODIFIER

Careless writers often leave participles, infinitives, clauses, and phrases dangling like orphans without parents to claim them. Take for instance this example:

When packed in metal containers, the saving in metal was estimated to be 80 per cent.

The saving is not packed in tin cans!

Or another example:

Taking into account consideration of cost, availability of raw materials, and qualities, it was decided to provide a capacity of 735,000 tons.

In this sentence a dangling verbal is attached to a neuter pronoun acting as an anticipatory subject joined to a verb in the passive voice.

Take still another example:

In making a decision between the various alternative policies discussed, this should be taken into consideration.

A ten-word phrase modifies a demonstrative pronoun which is not a subject that could make a decision. Recast, the sentence reads:

In making a decision between the various alternative policies, the board should take this vulnerability into consideration.

DIRECTION OF REFERENCE WORDS TO CERTAIN ANTECEDENTS

Like the orphaned modifier, the pronoun sometimes finds itself without parentage, with no reference word to which it belongs. It sometimes points to the wrong antecedent and sometimes squints at two possible words or constructions to which it may refer. To avoid ambiguity as well as ungrammatical construction, a writer needs to be sure that the antecedent is clear and that the pronouns are as close as possible to their antecedents.

LOCATION OF MODIFIERS CLOSE TO WORDS THEY MODIFY

Carelessly placed modifiers often make confusing sentences. A modifier should be placed next to the word it modifies, so that nothing can divorce it from its proper relationship.

USE OF ALL COMBINATIONS IN SENTENCE BUILDING

A writer produces strong prose when he builds sentences with all the patterns and combinations which are available to him. Too much writing is cramped into stereotypes because those types of structure are the habit in an office. A critic, looking at a series of reports, observed:

The main difficulty in these reports is sentence structure. The writers do not bend sentence structure to fit the contours of their ideas. They have a few cast-iron molds into which they pour all their ideas. They are slaves to inflexibility. They use a main clause where a subordinate clause could carry the meaning better. They use a clause where a phrase would be better. Trouble exists in structure words, not content words . . . and the concepts which they signify. The writers need drill in stating complex ideas complexly, not with uniform and heavy emphasis. All the machinery of the sentence exists for them to use.

SUGGESTIONS FROM HARVARD'S "ENGLISH A"

At Harvard University, Nieman fellows sat down with their instructor in "English A" to work out some principles of effective writing. Among other suggestions they recommended that writers must

1. group related ideas together
2. plan writing and express ideas in arrangements which will help the reader to understand and remember
3. identify the natural subject and the natural predicate by a feeling for the idea of the sentence
4. build the sentence as a whole in shapely and economical fashion around these two elements
5. use transitions not as formality but as a means of distributing emphasis, establishing distinctions, weighing relative importance in order
6. get along with a minimum of formal or conspicuous transitional sentences or phrases
7. illustrate the generalizations and generalize the particulars and illustrations
8. recognize that good expository writing is a tissue of general and particular, principle and fact, thesis and illustration
9. think big in small words
10. remember that writing for the mind of the reader differs from just putting words on paper.[4]

TRY YOUR HAND AT THESE •

- **to learn sentence building**
- **to review sentence patterns**
- **to develop language habits which combine economy in diction with clarity of presentation**

1. A draft of a report included this sentence to explain how a lawyer sets his fee:

> In the interest of a sound lawyer-client relationship, it is always wise to discuss fees with your lawyer at your first consultation;, and although it may not be possible for him to tell you in advance the exact amount of his fee, in some situations in which he can estimate the amount of time that will probably be required, he may make a specified charge, although sometimes a lawyer's fee is controlled by statutes or fixed by court rules,

[4] Adapted from *Nieman Reports* (Cambridge: Nieman Alumni Council, April, 1950).

and in some types of cases involving the recovery of money his charge may be a percentage of the amount recovered.|

Rework this paragraph into a number of clear sentences. Make use of interrogative, declarative, and imperative sentences. Be sure that important ideas are located at strategic positions. Vary your sentence beginnings. Make use of parallel construction in one sentence. Use strong motivating verbs. Underline the periodic sentences in your revision.

2. For a long time the United States Tariff Commission introduced a series of reports with this foreword:

> This report is one of a series that the Tariff Commission is preparing in response to requests, from the Senate Committee on Finance and the House Committee on Ways and Means, that the Tariff Commission investigate the principal domestic industries which have been affected favorably or unfavorably by war changes, and report to the Committees the pre-war status and conditions of these industries, the changes and new developments that have taken place during the war, and so far as possible, the probable post-war status of such industries with respect to foreign trade and international competition.

Break down this sentence and recast it in straight speech.

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TESTS FOR MEASURING INDIVIDUAL COMMUNICATIONS SKILLS

What measured competence in communications skills does a writer command? How well does he write? Does he read rapidly and comprehend what he reads? How effective is his speech? Does he listen and understand? In group conferences does he behave maturely? Does he participate constructively in discussions? In short, how well does he read, write, speak, listen, and participate? Every writer should know the quality of his performance as measured by reliable tests. His skill represents the tools of his trade.

The Cooperative English Test (150 minutes) measures performance in these areas:

READING COMPREHENSION

1. Vocabulary
2. Reading

MECHANICS OF EXPRESSION

1. Grammatical usage
2. Punctuation and capitalization
3. Spelling

EFFECTIVENESS OF EXPRESSION

1. Sentence structure and style
2. Active vocabulary
3. Organization

The writer summarizes the results of the test in the following score box:

Reading Comprehension Scores

Test	Scaled Score
Vocabulary	
Speed of Comprehension	
Level of Comprehension	

(Sum of Scaled Scores for Parts:)

Total Reading Comprehension	

Total English Score

Test	Scaled Score
Mechanics of Expression	
Effectiveness of Expression	
Reading Comprehension (Total)	

(Sum of Scaled Scores for the Three Tests:)

Total English	

A writer can project his individual score in terms of other members of his group on a chart like the following:

ENGLISH PROFILE

Cooperative English Test

	Low					Percentile Scale					High
Mechanics of expression	0	10	20	30	40	50	60	70	80	90	100
	:	:	:	:	:	:	:	:	:	:	:
Grammatical usage— Punctuation— Capitalization—Spelling											
Effectiveness of expression	:	:	:	:	:	:	:	:	:	:	:
Sentence structure—Style— Active vocabulary Organization											
Reading comprehension	:	:	:	:	:	:	:	:	:	:	:
Vocabulary—Speed—Level											

A writer may likewise visualize his performance in reading on a second chart:

ENGLISH PROFILE

Cooperative English Test

	Low										High
Vocabulary	0	10	20	30	40	50	60	70	80	90	100
	:	:	:	:	:	:	:	:	:	:	:
Speed of Comprehension	:	:	:	:	:	:	:	:	:	:	:
Level of Comprehension	:	:	:	:	:	:	:	:	:	:	:

Order *The Cooperative English Test,* Single Booklet Edition, Higher Level, Latest Form, from the Cooperative Test Division, Educational Testing Service, 20 Nassau Street, Princeton, New Jersey. Educational Testing Service cooperates with advisory, scoring, and reporting services.

Michigan Vocabulary Profile Test (60 minutes maximum) measures a writer's performance in accurately recognizing words in context in these eight fields:

a. human relations
b. commerce
c. government
d. physical science
e. biological science
f. mathematics
g. fine arts
h. sports

The score on the *Michigan Vocabulary Profile Test* gives an index to the writer's skill in communicating in the eight areas and roughly measures the depth of his interest in the particular fields as well as the breadth of his knowledge in the distributed fields.

He can project his individual score on the following chart.

Division	Percentile								
	2	7	16	31	50	69	84	93	98
Human Relations									
Commerce									
Government									
Physical Science									
Biological Science									
Mathematics									
Fine Arts									
Sports									
Total									
Standard Score	30	35	40	45	50	55	60	65	70

Groups can construct norms for their own local classification and develop distribution on the local as well as on the national standard.

Order *Michigan Vocabulary Profile Test*, Form A, from the World Book Company, Yonkers-on-the-Hudson, New York.

Brown-Carlson Listening Comprehension Test (50 minutes maximum) measures listening comprehension in five areas:

a. immediate recall
b. following directions
c. recognizing transitions
d. recognizing word meanings
e. lecture comprehension

A writer can visualize his scores in listening comprehension on a profile chart like this:

Comprehension area	Low				Percentile Scale						High
	0	10	20	30	40	50	60	70	80	90	100
	:	:	:	:	:	:	.	:	:	:	:
1. Immediate Recall	:	:	.	:	:	:	:	:	:	:	:
2. Following Directions	:	:	:	:	:	:	:	:	:	:	:
3. Recognizing Transitions	:	:	:	:	:	:	:	:	:	:	:
4. Recognizing Word Meanings	:	:	:	:	:	:	:	:	:	:	:
5. Lecture Comprehension	:	:	:	:	:	:	:	:	:	:	:

Order the *Brown-Carlson Listening Comprehension Test* from the World Book Company, Yonkers-on-the-Hudson, New York.

Economy in test administration makes desirable the use of *answer sheets* so that the test booklets can be used again. Answer sheets may be scored either by hand or by machine. If the answer sheets are to be scored by machine, the examinees must use special electrographic pencils. If they are to be scored by hand, the examinees should use a soft lead pencil. In ordering tests ask for the scoring key and interpretative manual.

11

PARAGRAPHS

THE PARAGRAPH ORGANIZES AND EDITS A WRITER'S IDEAS FOR THE CONvenience of his reader. By the simple mechanical operation of indentation he creates a neighborhood of sentences which work together in partnership to explain one central thought. The paragraph identifies a unit in the development of the writer's thought, just as the clock on the filling station pump rings a bell as a gallon of fuel flows into the gasoline tank. The paragraph guides the reader's eye; it helps him to grasp quickly what the writer is saying. The paragraph *as form* is just a highly useful literary gadget—a tool to sharpen the process of communication.

THE PARAGRAPH AS ONE CENTRAL THOUGHT

Because a good paragraph explains *one* central thought, the writer must first of all be clear about what this central idea is. His central thought

is the hub of his paragraph; the other sentences are the spokes. The writer therefore needs to identify his central thought for his reader. He builds his paragraph around it. He says to his reader bluntly: "See here, sir, this paragraph tells you about this idea!" He states that idea and explains it in sufficient but economical detail. He makes the idea so much the reader's own that he can use it, remember it, recall it, and put it to work. Then he gathers the neighborly little subordinate sentences around to develop and explain with specific and vivid detail that central thought.

But how does the writer as a paragraph craftsman know when his paragraph is complete? The answer to the question is this: he completes his paragraph design when he has presented enough particulars to make the central thought crystal clear, exact, and significant, and when he relates that central thought to the ideas which precede and follow it in the report. The proper length of a paragraph is much like Abraham Lincoln's idea of a speech: it should be long enough to reach the end.

Good paragraph writing comes from conscious design until design becomes a habit. To establish that habit a writer must struggle to build his paragraphs as carefully and sensitively as the artist develops his canvas. Exact paragraph construction makes reading easier because good readers (1) look for the central thought, (2) then for supporting details, and (3) finally for the importance of the whole idea in its context and its relation to other ideas.

IMPORTANT IDEAS IN IMPORTANT PLACES

Every paragraph has two strategic positions, neither of which may be surrendered in good writing to inconsequential or unemphatic sentences. Strategic Position Number 1 begins the paragraph; Strategic Position Number 2 ends the paragraph. The sentence which closes a paragraph must always be strong enough to deserve the honor of this important location. Paragraphs too often peter out because the writer's thought process, like his literary skill, gets thin. Good writers design firm paragraphs by locating important ideas at the beginning and the end.

NATURAL LENGTH OF PARAGRAPH

Every good paragraph has a natural length dependent upon the purpose which it serves. Bad paragraphs are either too short or too long. How, the writer asks, can he test the proper length of a paragraph? The answer is that no hard and fast rule exists by which he can determine the optimum length of a paragraph. That length must always depend upon the purpose which the paragraph serves in the whole report and the supporting sentences which the writer must use to explain its one central idea. In general a double-spaced typewriter sheet contains about 300 words. A writer should be critical of his writing when a page of typewritten copy

contains more than three *or* less than one complete paragraph. When more than three paragraphs break up the page, he should ask himself: "Does each one of the short paragraphs actually develop a single important thought?" When solid copy indicates an incompleted paragraph to the page, he should ask himself: "Am I including so many ideas and details in one indented section that my paragraph loses its coherence, unity, effectiveness, and attractiveness? How many central ideas am I writing about in this one long paragraph?" In a good paragraph the answer must be not "six," or "three," but "one." A writer can strengthen his command of the paragraph by the use of the Paragraph Development Schedule suggested in Figure 11.1.

PARAGRAPH DEVELOPMENT

TEN PATTERNS OF PARAGRAPH DEVELOPMENT

Report paragraphs fall into definite patterns of development.

Pattern 1. *development by definition and description*
Pattern 2. *development by historical summary*
Pattern 3. *development by description of process and operational detail*
Pattern 4. *development by cause and effect*
Pattern 5. *development by case history and illustration*
Pattern 6. *development by interpretation, evaluation, and comment*
Pattern 7. *development by occasional summary*
Pattern 8. *development by précis, paraphrase, and abstract*
Pattern 9. *development by examination of alternatives*
Pattern 10. *development by directive*

PATTERN 1 • DEVELOPMENT BY DEFINITION AND DESCRIPTION

In paragraphs developed by definition and description the writer gives his reader all the fundamental concepts he needs to follow the presentation. The whole structure of the document depends upon the clear focus of the inquiry and the exact reference of the writer's words.

In defining the purpose of a report a writer begins:

> The purpose of this report is to present a city-wide plan, coordinated with the Metropolitan Area as a whole, for providing Washington with improved facilities and services, and for financing them. An over-all city plan is therefore necessary to show in concrete terms what needs to be done.

In a report on shingles, an industry specialist describes the product in this paragraph:

Shingles, rectangular pieces of wood tapered so that one end is thinner than the other, cover roofs and side walls of houses, barns, garages, sheds, and similar buildings. The market classifies them as (1) random widths, (2) dimension shingles, and (3) shakes. Most mills saw and pack shingles in random widths from 3 to 14 inches. Dimension shingles, packed in uniform widths of 5 or 6 inches, are a small part of the output. Shakes, now machine-made in limited quantities, were originally split by hand from bolts of wood. United States markets grade all red cedar shingles in three standard lengths, 16, 18, and 24 inches, designated by the industry as No. 1, No. 2, and No. 3, respectively. Random width and dimension red cedar shingles are packed in bundles, each of which

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PARAGRAPH DEVELOPMENT SCHEDULE

A writer owes it to his reader to make his organizational plan clear.

Tell the reader exactly what one single idea the paragraph communicates.

Write out in this space the one central thought of the paragraph.

Explain this central thought clearly by the presentation of supporting details.

Have a theory for the order of arrangement of detail and be consistent. List supporting detail.

a)
b)
c)
d)
e)
f)

Give signals to the reader, making it easy for him to find and to remember the important facts within your paragraph.

a) *Underscore key words.*
b) *Use numbers and letters to indicate sequences.*
c) *Use different type faces to identify different levels of detail.*

Locate important sentences at the strategic points of the paragraph—the beginning and the end. Think these positions out.

a) *Write out beginning sentence.*
b) *Write out ending sentence.*

Show the reader where he is being led.

a) *State connection of main thought of this paragraph with that of preceding paragraph.*
b) *State connection of main thought of this paragraph with that of succeeding paragraph.*

---

will cover 100 square feet of roof if the shingles are laid at a prescribed butt exposure for each length.

In enacting a statute, a legislature defines "malt beverages":

All fermented beverages of any name or description manufactured for sale from malt, wholly or in part, or from any substitute therefore containing one-half of 1 per cent of alcohol by volume and not more than 3.2 per cent of alcohol by weight at 60° Fahrenheit.

In explaining a sulfur purification and combustion apparatus an engineer writes:

The sulfur furnace consists of a steel shell lined with insulating firebricks. At one end is the sulfur gun and air inlet. About three-quarters of the distance into the furnace is a baffle wall. After the baffle wall, the furnace is connected to a waste heat boiler in which steam is generated.

PATTERN 2 • DEVELOPMENT BY HISTORICAL SUMMARY

Once a writer has described clearly what he is discussing, so that his reader is on the same firm ground, he needs promptly to give his reader the background of his report, to make him at home with its history. The reader, concerned with a current problem, wants to know where the problem came from and why it is a problem. The paragraph developed by historical detail and summary lays the foundations in the experience of the past for the present situation. It locates the discussion in a perspective.

Describing the backgrounds of development of synthetic rubber a reporter writes:

The production of guayule rubber in the United States was started experimentally about thirty years ago. The industry never produced any sizable amount of rubber and was still on an experimental basis in 1942. The emergency created by the loss of the Far Eastern sources of rubber, and the need for the natural product even though substantial quantities of synthetic rubber should become available, led to the expansion of the small existing industry. Early in 1942 the government purchased the property of the International Rubber Company, the only producer, located near Salinas, California. More than 700 acres of land, a large part of which was already planted in guayule and various processing plants and equipment, were included in the purchase. The planting of up to 75,000 acres of guayule was authorized by Congress. Additional planting areas were immediately leased, labor was procured, and all the available seed was planted in irrigated nurseries. This is the background of the present situation.

PATTERN 3 • DEVELOPMENT BY DESCRIPTION OF PROCESS AND OPERATIONAL DETAIL

The paragraph developed by a description of process or operational detail outlines how a combination of factors work together to produce a result.

Describing two methods for processing coffee a reporter writes:

The two methods of processing coffee for market are known as (a) the "dry" or "natural" and (b) the "wet" or "washed." The dry method spreads the berries in a thin layer on open drying grounds which are usually concrete or brick surfaces, where they are turned over several times a day. After the first few days, the berries are protected from rain and dew by covering them with tarpaulins or raking them into piles under cover. After they have dried in the sun for about three weeks, the nearly dry beans are piled up or put into a granary where for two weeks they undergo a light sweating. This preserves the green color and facilitates the later removal of the parchment. Some planters hold the beans in storage for several months to improve their quality before hulling. The dried husks are removed on the smaller plantations by threshing or pounding in a mortar and on the larger estates by specially constructed hulling machines.

The wet method, which produces the so-called washed coffees, is usually practiced on large plantations with ample water supply. Uniformly ripe berries are first soaked overnight in tanks to soften the pulp and then floated into hoppers of the pulping machines. Nutmeg graters draw the berries and strip off all soft parts. The pulp is carried off through a pulp chute while the coffee passes through holes in the stationary rubbing surface to the fermenting tanks filled with water. Fermentation in water is known as wet fermentation, but if the water is drained off and the berries are fermented in a semi-dry state, the process is known as dry fermentation. This is the most important step in the preparation of washed coffee, as it governs the color and quantity of the beans. After fermentation the beans are washed and spread out to dry as in the dry method.

PATTERN 4 • DEVELOPMENT BY CAUSE AND EFFECT

The paragraph developed by the relationship of cause to effect or effect to cause explains the forces that combine to produce certain consequences.

The price of the commodity fell sharply. The cause was largely the decline in the use of *Ezerub* by housewives. By analysis *Ezerub* contains 90 per cent of the commodity. Despite continued research and product development, no other market could be found. The supply, therefore, continued to pile up without the identification of a new market or the opening up of a new channel of demand.

Describing the chain of events which led to the repeal of an agreement, a reporter wrote:

The weakness of the plan soon became apparent. Prices rose excessively. Production in areas not controlled by the agreement increased. New channels of supply developed. As the price rose, competing companies developed a synthetic product. Although new competition entered the market, profits of companies operating under the agreement remained high. When at the end of the year large dividends were declared, public sentiment among consumers intensified. As unfavorable press comment grew and competition of the synthetic producers strengthened, management admitted that the plan was not accomplishing what it was intended to do. Agitation for its abandonment spread. When the board of directors met at the end of the fiscal year, it agreed that it would be wise to end the agreement.

PATTERN 5 • DEVELOPMENT BY CASE HISTORY AND ILLUSTRATION

The paragraph developed by case history and illustration presents the details of an actual record. It may be the statement of a clinical medical report or the analysis of a specific example presented to make vivid a point.

Analyzing the income of employees of the Bank of Korea, an economist reported:

> Take the case of a bureau chief in the Bank of Korea as an example. He receives a monthly salary of 60,000 wons supplemented by a monthly residence allowance of 70,000 wons. In addition the bank adds to his income 20,000 wons a month for each dependent, a money food subsidy equivalent to 2.5 hops of rice a day for him and his dependents, a free lunch, dispensary service at reduced rates, transportation, free haircuts, tailor service to make clothes at the cost of the material and thread, and maternity allowances for his wife. In every case studied the employee received about 300,000 wons a month less than was necessary to cover the bare necessities of living.

In scientific inquiry the case history plays an important part. Reporting on a vascular injury a physician wrote:

> A young man was admitted to the hospital approximately three hours after having received a small caliber gunshot wound in the left subclavian artery. He had a large pulsating hematoma. No pulse was palpable in the trachial, radial, or ulnary arteries. The hand was cooler than the contra lateral hand, and the patient had a subjective sense of slight numbness of the hand and forearm. However, no definite neurological deficit was demonstrable on examination. It was clear that the extremity would survive and that treatment of the aneurysm that would be developed could be deferred. On the other hand, the patient had arrived shortly after his injury in an institution where proper facilities were available. It was decided to proceed with the operation. After isolating the artery proximal to the site of the injury, the hematoma was evacuated and the completely severed axillary artery was repaired by end-to-end suture. This procedure resulted in complete restoration of normal circulation and in the cure of the pulsating hematoma.

PATTERN 6 • DEVELOPMENT BY INTERPRETATION, EVALUATION, AND COMMENT

In an occasional paragraph of summary the writer says to his reader: "Now let's stop here a minute and review what we've been talking about. Let's pull our facts and ideas together. Let's see how all this looks before we go on to the next point." Paragraphs of this type are necessary. They tie together points in the report and keep the reader moving with the writer. They are milestones pointing the way toward the destination of the report. In ending the first part of a three-section report, a writer pulled his ideas together like this:

> In short, phosphorus (1) stimulates early root formation and growth, (2) gives a rapid and vigorous start to plants, (3) hastens maturity, (4) stimulates blooming and aids in seed formation, and (5) appears in the crops used as foodstuff

for the human diet. But what part does calcium play? This subject is discussed next.

PATTERN 7 • DEVELOPMENT BY OCCASIONAL SUMMARY

The summary, like the précis and the paraphrase, achieves brevity by the restatement of essential data and ties facts together for working purposes. It is, however, a more mechanical performance concerned with a recapitulation in shorter form of the substance of a document. Analyzing a bill, a lawyer writes:

> Section 14 provides that within 60 days after passage the President shall appoint a commission of five experts to make a thorough survey of the economic conditions on the island of Puerto Rico.

PATTERN 8 • DEVELOPMENT BY PRÉCIS, PARAPHRASE, AND ABSTRACT

Every report writer constantly digests statutes, regulations, reports, speeches, and documents. He summarizes points of view for incorporation into his text. Methods of abbreviating materials for accurate statement in shorter form are referred to in terms of the way the work is done as (1) a précis, (2) a paraphrase, (3) a summary, and (4) an abstract. Although in practice these forms overlap, they have individual characteristics.

The précis is a literary device widely used to produce abbreviated but exact statement of the substance of a matter in clear, concise, readable, and accurate form. Originating in diplomatic correspondence as an economical and effective form of reporting, it takes its name from the French *précis,* meaning "to cut down a statement." The précis selects the important facts and ideas in a passage, condenses them into a brief and lucid pattern, and restates them in the writer's own language. The précis is careful to preserve the organizational pattern, idea structure, mood, tone, and viewpoint of the text on which it is based. To write a good précis, a writer takes his pad and pencil and jots down the pith of the material, being faithful to include every essential point in the original. Then he summarizes the material orally in his own words before he writes down the substance in his own shortened restatement. He reproduces the emphasis which the author gave in his original material. The writer follows the plan of that original; he does not rearrange thoughts. He reproduces them accurately in condensed form. He uses his own words, being careful to leave out nothing which is essential to make the restatement correspond in content to the original.

A reporter boiled down into this précis a long research discussion on a human relations study in a steel mill:

> The research team discussed at length the underlying theory. Briefly, this holds that each of us in the course of development has painfully worked out a

set of assumptions as to what is real and what is important in determining our behavior. These assumptions give meaning to our lives and offer some protection from fear and uncertainty. Even personal attempts to modify such deeply-rooted assumptions arouse anxiety and resistance which can only be overcome by serious psychological effort. At certain points and under certain conditions the need for change may offset anxiety and resistance to both access and change. At this point the student of human relations may be permitted to make first-hand observations of important areas of behavior. Unconscious forces in group behavior and unwitting collusion between groups for purposes of which group members are only dimly aware are important factors in the process of social adaptation. Such unrecognized collusion may be a main source of difficulty in implementing agreed plans for social development and social change.

The paraphrase gives the accurate gist of a passage or work by a freely rendered restatement. One of the most useful of all techniques, it presents the sense of a text in the writer's own words and in his own style. It allows him greater liberty than the précis.

The personnel manager made his position clear. By "role-taking" he meant the process by which individuals and groups occupy appropriate positions in the social structure. As working members of the factory community, they became parts of the organization which before they felt to be external to themselves.

An abstract briefly summarizes the findings made, facts presented, conclusions drawn, and recommendations offered in a report. A précis or a paraphrase may be incorporated in the text, but an abstract stands as a separate unit and should be as brief as possible. It may be prepared merely by omitting words from the original text, or it may be written by concise and faithful restatement in the writer's own vocabulary. The American Institute of Physics suggests that an abstract should be written concisely for the reader in normal rather than highly abbreviated English, with the assumption that the reader has some knowledge of the subject but has not read the paper.

PATTERN 9 • DEVELOPMENT BY EXAMINATION OF ALTERNATIVES

The report writer is often compelled at certain stages in his work to examine the possible outcome and consequences of one cause of action weighed against others. If one set of conditions exists, then a certain result may be expected. Often the writer presents the material so that the reader can make a choice.

In discussing the location of a chemical plant, an engineer wrote:

Four principal sites were under consideration as being possible locations for the erection of this project. These were (1) San Fernando, Bataan, East Coast, Batangas, and Mandaluyong. If the site at San Fernando should be selected, the plant would be located at the northern extremity of the cultivated areas of the Islands. From this location distribution costs would be high. The location lacks fresh water during the dry season and adequate fresh water at all times. To

meet this difficulty the company would be compelled to sink artesian wells with pipe lines to handle the water. If the plant should be located at Bataan, East Coast, it would stand 63 kilometers from the closest railway point. This situation would increase distribution expense by making the double handling of shipments necessary. If the site at Batangas should be selected, docks for ocean-going vessels would have to be protected by a sea wall and flanking levee sufficiently high to hold a six-foot fill. In contrast to the disadvantages of these alternative sites, Mandaluyong offers a location with nine advantages on the Pasig River. In the first place, the side on the river provides a channel sufficiently deep to allow lighter vessels to dock to unload raw materials and to take finished products aboard. Water is good and plentiful. No housing will have to be furnished. . . .

PATTERN 10 • DEVELOPMENT BY DIRECTIVE

Words can initiate action and make things happen. Language which tells a person what to do, controls his behavior, or brings something into being by describing steps to be taken, is directive. An army field order is directive when it says:

The independent cavalry will move at 5:30 A.M. by the Easton-French-Mail-Fort Leavenworth road and will cover the movement. It will seize the bridge over the Missouri River and will send patrols to the eastward.

TRY YOUR HAND AT THESE •

- **to understand the paragraph as a tool used to sharpen communication**
- **to gain experience in paragraph development**

1. Develop a ten-paragraph report explaining step by step how you are writing your long form career report. Attach to your manuscript a paragraph development schedule for each of the ten paragraphs. Follow this general outline:
   ¶1: state your problem, define your terms, and bring to clear focus the nature of your problem.
   ¶2: give your reader a short history of the report. Explain why you are writing it and why it is important to you.
   ¶3: describe the steps you are taking to develop the report. Give attention to the note-taking and filing system you have set up, the bibliographical research, your methods of gathering material, and the kind of outline you are using.
   ¶4: show how your career solution has resulted from certain influences in your life.
   ¶5: cite case histories of men or women in the profession you have selected. Show how these "models" are guides to you.
   ¶6: evaluate your choice of career and tell why you have selected it.
   ¶7: summarize your presentation in the preceding six paragraphs. End with a transition sentence which leads into the next paragraph in which, by paraphrase and précis, you support your choice of career by evidence produced from what may be considered good authority.

¶8: support your career choice with additional statements by acknowledged authorities.

¶9: weigh your choice of career against other courses you might have followed. Give reasons to support your choice.

¶10: conclude with a statement phrased on directive language which may encourage a friend to consider seriously the selection of the same career.

2. When you have completed your report, prepare a 100-word abstract and attach it to the manuscript.
3. "Transition" means the smooth and coherent progression of ideas from one sentence or paragraph to another. By proper planning of transition, the writer builds *thought bridges.* These bridges are of two kinds: (1) connection between statements in a paragraph and (2) continuity of ideas from one paragraph to the next. Connection between sentences within the paragraph is achieved by (1) a thought relationship expressed or suggested by a conjunction or adverb, (2) parallel sentence structure, (3) a pronoun referring to a word in a preceding sentence, (4) some words of the first sentence, perhaps the object, used as the subject of the second or at the beginning of the second, and (5) continuance of the same subject from sentence to sentence. By citing specific examples of transition from articles in the *Reader's Digest,* write a short information report explaining various methods by which the writers have achieved transition.

12

STOPS

LIKE THE GREEN, AMBER, AND RED TRAFFIC LIGHTS ON THE AVENUE, punctuation marks give signals. Placed along the reader's path, they show him how to move forward to understand the idea in a sentence. Because precise thinking precedes précis writing, the report writer punctuates with his mind before he punctuates with his pencil. He uses signs to make his meaning clear.

In describing the function of punctuation, Carey suggests that the "needs of the eye are not exactly the same as those of the voice." He points out that the "meaning of what is written should be conveyed to the reader's mind, through his eye, with the least possible delay, and without any ambiguity." The main function of punctuation, Carey says, is to make perfectly clear the construction of the written words. Then Carey suggests three principles for guidance in the use of punctuation:

1. **Use stops as sparingly as sense will permit.**

2. Use stops as freely as needed to assist the reader to grasp the sense of the communication immediately and to avoid any possible ambiguity or to relieve a lengthy passage.
3. Recognize that the best punctuation is that of which the reader is least conscious, "for when punctuation, or the lack of it, obtrudes itself, it is usually because it offends."[1]

PUNCTUATION SITUATIONS IN THE SENTENCE

The writer must understand the basic punctuation situations in the sentence. Every sentence begins with a capital letter and ends with one of three kinds of stops—either a period, a question mark, or an exclamation point.

Within any sentence a writer uses punctuation marks

1. *to separate main clauses*

   The Senate did not act on the bill, but the House discussed the companion measure in great detail.

   A major part of the report was undertaken in cooperation with the Federal Power Commission; to a lesser extent it was carried out in cooperation with the combined Production and Resources Board.

2. *to separate elements in a series*

   The Commission has assembled a large volume of information on such subjects as climate, harbor facilities, water supplies, foodstuffs, building materials, transportation and communication facilities, and sanitation and health.

3. *to set off a nonrestrictive modifier*

   Exports from these eight countries, which averaged about one-half billion pounds annually during the decade before World War II, comprise virtually the total international trade in glass.

A nonrestrictive modifier is a qualification which may be omitted from the sentence and still leave the meaning complete. A writer can define his modifier by drawing a box around it. This parallelogram tends to clarify thinking in sentence analysis.

A restrictive modifier identifies a particular unit in the sentence. Without the restrictive modifier the sentence would not be complete. A comma does not set off a restrictive modifier.

Nonrestrictive: Three companies—the Pittsburgh Plate Glass Co., the Libbey-Owens-Ford Glass Co., and the American Window Glass Co.—operating 8 plants, account for over 75 per cent of the total output.

[1] G. V. Carey, *Mind the Stop* (Cambridge: University Press, 1948), pp. 4, 12.

Restrictive: The United States census report indicating that 18 per cent of the dwellings in the United States need repairs describes the unsatisfactory state of repair of American homes.

Nonrestrictive and *Restrictive:* The terms "cylinder glass" and "crown glass" which were formerly synonymous with the term "window glass," identified specific methods of manufacture that have become obsolete.

4. *to set off a long dependent clause coming first in the sentence*

   As the millions of trees planted in the Far East came into bearing, the capacity to produce expanded much more rapidly than demand at prices producers were willing to sell for.

The best current practice, however, omits the comma after short, dependent, initial clauses.

IF THIS SHOULD OCCUR *several ways remain to meet the requirements both for rubber-making materials and for liquid fuel.*

5. *to set off a quotation*

   a) by a colon preceding a long or indented quotation

   An announcement by the United Kingdom Colonial Office at that time stated in part:

   b) by the insertion in the sentence of quotation marks but without a comma

   On July 18 the Department of State announced that it had "accepted an invitation to send officials to meet with officials of the Governments of the United Kingdom and the Netherlands."

   c) by the insertion of a comma before and after a brief direct quotation following an introductory phrase

   "The personnel," he said, "was entitled to a vacation."

6. *to set off parenthetical elements, that is, phrases or clauses that in no way alter the meaning or construction of the sentence*

   Something like 25 million square feet, *it seems probable,* will be needed annually for replacement.

THE PERIOD

A period is used

1. *to close every declarative and imperative sentence*

   Prices of both wool and lambs respond quickly to changes in general business conditions.

To convey an idea clearly use not only the right words but also as few words as possible.

2. *to close an indirect question*

I am asking that you indicate the procedure you have followed.

3. *to close a polite request*

Please photostat page 31 of the attached manuscript.

4. *to substitute for a parenthesis after a letter or number denoting a series*

a. Buna S		a) Buna S
b. Butyl		b) Butyl
c. Neoprene	*preferred to*	c) Neoprene
d. Buna N		d) Buna N
e. Thiokol		e) Thiokol

5. *to close a question intended as a suggestion not requiring an answer*

May we ask prompt payment.

6. *to indicate the omission of a word or words, or an ellipse, as the omission is called*

a. Use three periods (. . .) to indicate the missing words within a sentence.

The world production of improved wools . . . was nearly 3,000 million pounds, grease weight.

b. Use four periods (. . . .) to indicate that the preceding sentence has been brought to a close.

The cost of synthetic rubber in the postwar years cannot be forecast with any approximation of certainty. . . . The estimate based on amortization over 10 years was about 16 cents.

7. *to space a run-in sidehead which is a part of the type line and which does not occupy a line itself*

Principal domestic markets. Consumption of red cedar shingles in the United States does not follow the pattern of density of population.

8. *to separate integers from decimals in a single expression*

Sheep per 100 pounds	$10.75
Per cent from wool	45.50

9. *to end explanatory matter beneath charts and tables*

Source: Prepared by the U. S. Tariff Commission from data supplied by the Rubber Reserve Company.

A period is not used

1. *after center heads*

LABOR CONDITIONS IN THE UNITED STATES

Adjusting Numbers

75. In rounding numbers a digit less than 5 or a fraction less than ½ is discarded, a digit greater than 5 or a fraction greater than ½ adds 1 to the next digit to the left.

2. *after side heads which are not run-in but are given an entire line of space*

TYPES OF LABOR

LOG PRICES IN CANADA

QUESTION MARK

The question mark is the end stop in a sentence which asks a question. It is also a symbol of query when more than one question is asked in the same sentence.

What was the company's program? It was to provide health benefits.

How much of the existing plant should be kept after the war? Should the government maintain a stockpile? If so, how should it be acquired and maintained?

Was the increase the result of higher prices? or continuing favorable weather conditions? or a feminine demand for wool fabric?

"Did you check the punctuation?" he asked.

EXCLAMATION POINT

The exclamation point is the end stop in a sentence used to indicate a forceful utterance, strong feeling, special emphasis, or surprise.

Contrary to expectations, the board adopted the committee minority report!

The managing editor made it clear that editorial carelessness must stop!

COMMA

The comma, most frequently used and misused of all punctuation marks, is the symbol indicating the smallest structural division of a sentence. It should never break up a phrase which really ought to be grasped as a unit.

A comma is used

1. *to separate two sentence elements that might otherwise be misunderstood or joined as a thought unit when they should be separate*

When I called Paul, Ellis answered.

2. *to set off words, phrases, or clauses in a series* (see also #2, page 184)

   The season's output consisted of 80 per cent potatoes, 8 per cent carrots, 6 per cent cabbage, and 5 per cent onions.

A writer should remember to place a comma after each member within a series of three or more words, phrases, letters, figures, or clauses. The formula for the use of the comma in series is this:

A, B, C

or

A, B, and C

A comma is always used before the *and* which precedes the final word in a series.

3. *to block out each of a series of coordinated qualifying words*

   The chief constituent consists of dry, ripe beans.

   She was a mild and docile, genial but reserved, serene yet animated copy of her sister.

4. *to separate the title and the name of an organization in the absence of the words* OF *or* OF THE

   Chief, Technical Service

   Chairman, Committee on Appropriations

5. *to separate the name and number of an organization*

   National Brotherhood of Operative Potters, American Federation of Labor, No. 217

   Columbia Typographical Union, No. 101

6. *to separate numbers in dates within the sentence*

   Ceiling prices for china were kept at the level prevailing for the given producer between October 1, 1951, and October 15, 1952.

7. *to separate a postal delivery zone from the state*

   Detroit 16, Michigan

8. *to precede titles such as Jr., Sr., Esq., Ph.D., LLB., F.R.S.*

9. *to show the points of division in a compound sentence before the coordinating conjunctions* AND, BUT, OR, NOR, *and* FOR (see also #1, page 184)

   The small home shops are scattered over the producing districts, but a certain division of labor is obtained by assigning to each family the production of a particular class of articles such as cups or saucers.

to avoid confusing the conjunction FOR *with the preposition* FOR

The same machines stamp the trade mark in ceramic ink on the bottom of each piece, for the identification is important in internal trade.

10. *to set off a long subordinate clause which precedes the main clause of a sentence*

While the plant in Detroit was tooling up to produce the new engine, the sales department developed promotional plans to introduce the new model.

11. *to set off a long phrase which precedes the main clause in the sentence*

More operative upon rubber than upon most other commodities, the price-making forces produce wide fluctuations.

12. *to set off a subordinate clause or long phrase following the main clause when it is* (1) *not closely related in thought and* (2) *not an essential modifier, the standard of usage being in the degree of relatedness in the thought communicated*

The amount that was used before the war came almost entirely from Mexico, where cheap land and low wage rates permitted the production of guayule at costs considerably under those in the United States.

But

It should be less difficult than heretofore to achieve reasonable stability of prices under conditions which fully protect the interests of industrial and ultimate consumers.

A comma is not used

1. ~~*between the month and year in dates*~~

June, 1952,

February and March 1953

2. *before a dash or parentheses*

3. *in a compound sentence when the clauses are short and closely related in a meaning*

Most do their own logging but the straight mills depend upon the open market.

4. *after short introductory phrases which are clear in meaning and consistent in style*

On the side of demand the amounts taken off the market are influenced by changes in consumer incomes. On the side of supply the amounts of plantation rubber respond but slowly to changes in price.

SEMICOLON

The semicolon indicates a pause longer than that suggested by a comma. A semicolon is used

1. *to separate clauses not joined by a conjunction*

   The largest plant had an annual capacity of about 10 million dozen pieces; it had between 20 and 25 per cent of the total earthenware capacity of the United States.

2. *to separate clauses within which commas are used*

   By informal agreement of the associations of producers in both countries, plantation tapping was suspended for the month of May; but early in the next year, after protracted discussions, the two governments announced that agreement seemed impossible.

3. *to precede clauses in a compound sentence where the connective is one of the following conjunctive adverbs*

   accordingly
   also
   consequently
   furthermore
   hence
   however
   indeed
   likewise
   moreover
   nevertheless
   otherwise
   so
   still
   then
   therefore
   thus
   yet

   Until the foreign market demand developed, the industry had been operating at substantially less than its potential capacity; however, no producers had failed.

Some writers prefer to join clauses introduced by *yet, so,* and *then* with a comma rather than a semicolon. Such usage is proper if the writer maintains uniformity of style.

COLON

A colon is a punctuation sign used to show that something is to follow. A colon is used

1. *in statistical table legends*

   Table 11. Rubber: United States Imports, 1940-1950

2. *in notes*

   Note: Figures in the above table cannot be balanced because they do not include statistics on exports or re-exports.

3. *in systematic tabulation of items, generally presented in parallel form*

The basic steps in the production of Buna S from butadiene and styrene are:

1. emulsification
2. polymerization
3. coagulation
4. collection

4. *when a second clause is a restatement or amplification of the first*

A summarization of the projects for war agencies follows: summaries of reports available to persons outside of the Government, reports resulting from investigations made by these agencies, memorandums prepared for the Office of Foreign Relief and Rehabilitation, and information for the Office of Economic Warfare.

5. *in the salutation of a business letter*

James H. Smith, Esq.
175 Main Street
Cabot 6, Massachusetts

Dear Mr. Smith:

6. *in the heading to a memorandum*

TO:	DATE:
FROM:	
SUBJECT:	

7. *in place of a semicolon, to emphasize the relation between the two clauses in a compound sentence*

The ever-present problem in the domestic industry is the large capacity of the mills: this fact taken together with the fluctuating demand creates instability.

8. *in separating minutes from the hour in expressions of time, chapters from books of the Bible, subtitles from the titles of books, and publisher from the place of publication in a bibliography or footnote*

11:40 A.M.

Matthew 3:5

Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1957

9. *in introducing formally any matter that follows*

The question for discussion is: What policy shall be adopted?

10. *following introductory lines in lists and tables if subentries follow*

    Peninsula District:
      Salisbury

      Federalsburg

In using the colon a writer needs to remember that it points to what follows, that it introduces or anticipates something, whereas the semicolon indicates separation between elements—something more than that indicated by a comma, something less than that indicated by a period.

QUOTATION MARKS

Quotation marks indicate that the words set off by them have been taken from another writer or need to be given special attention. They are either double or single.

Single quotation marks are used at the beginning and end of a quotation within a quotation.

To quote from the Commissioner's report: "The memorandum entitled *Exchange Controls* points out that 'exchange control and blocked currencies probably will be conspicuous in the trade situation.' "

Double quotation marks are used

1. *to set off a short quotation inserted in the text of the sentence*

   The board of directors announced that it had "accepted the offer of the X company to merge by an exchange of stock." It pointed out "that consideration was also given to extend the markets of the consolidated corporation."

2. *to set off each part of an interrupted quotation, with commas setting off the quoted matter from the interrupting reference*

   "The New York office," the report said, "is carrying out an extensive analysis of the complaint."

3. *to enclose ordinary words used in arbitrary ways, misnomers, slang expressions, and to call attention to technical words*

   It was a "gentleman's agreement."
   The report was written in "gobbledegook."
   He voted for the "lame duck amendment."

4. *to enclose descriptive words and phrases following such terms as "the item," "the concept," "entitled," and similar terms*

   Of what does the item "miscellaneous debts" consist?

5. *to enclose the titles of short poems, songs, parts of books, articles, and radio and television programs*

   When one reads Frost's "The Road Not Taken," he hears a thoughtful confession.

Quotation marks are not used to set off quoted passages involving several sentences when the matter is indented and single-spaced or set in smaller type.

In a memorandum to the Tariff Commission employees the chief of the technical service wrote:

> Writing good reports is hard work, and many experts do not prepare better reports simply because they do not work hard enough at the task. . . . Even the best and most experienced writers rewrite and revise their work several times before it reaches the draft stage.

The following rules are helpful in locating other punctuation signs in relation to the quotation marks.

1. *Place periods and commas inside the close-quotes whether they belong to the quotation or not.*
2. *Place colons and semicolons outside the quotation marks.*
3. *Place a question mark inside the quotation mark when the passage quoted is a question, outside the quotation mark when the passage quoted is a part of a sentence that includes a quotation.*

PARENTHESES

Parentheses enclose a word, phrase, clause, symbol, or sentence inserted as a comment or explanation in the text which is grammatically complete without the parenthetical material. The word itself means "to put beside." Parentheses are useful only when they produce an extra measure of clarity. The discussion of parenthetical expression in Chapter 4 shows how easily they can interrupt the flow of thought.

Parentheses are used

1. *to confirm a statement given in words*

   I promise to pay in thirty (30) days.

2. *to make sense clear in reporting hearings*

   The Chairman (to Mr. Ames)

   The Clerk (reading)

3. *to set off numerals used to indicate items in a sequence within the structure of a paragraph*

> Most promising opportunities for labor-saving through further mechanization are in connection with the following operations: (1) finishing of unfired ware after drying, (2) placing of ware on kiln cars, (3) various methods of applying decoration, and (4) inspection of fired ware.

4. *to achieve economy of diction with added clarity*

> The monthly ratio of active mills to total mills during the years 1941-1943 fluctuated between 70 per cent (September 1941) and 44 per cent (January 1943).

Parentheses are not used

1. *to set off a qualifying phrase or clause organically related to the text*

> The United States government requested an increase, partly retroactive, in the quota.

2. *to set off information that should be a footnote or included without halting the flow of the sentence*

> The price of rubber, as Chart I shows, began to increase.

3. *to take the place of commas setting off a nonrestrictive clause*

> A writer must obtain permission to reproduce, in whole or in part, copyrighted newspaper articles.

Do not use parentheses to set off "in whole or in part."

4. *to substitute for simple prepositions such as "at" and "of"*

> Stocks of red cedar logs in the waters of Puget Sound, Grays Harbor, and Columbia River reached a total of about 90 million feet in the summer.

Do not omit "of" and substitute parentheses around the names of the waters.

THE DASH

A dash indicates emphasis and sometimes an unexpected turn of thought. In general its use is much like that of the comma. A dash is used

1. *after a table number, preceding its title*

> Table 23.–

2. *before a final clause that summarizes a series of ideas, when the dash can be used more effectively than a colon*

   Freedom of speech, freedom of worship, freedom from want, freedom from fear—these are the fundamentals of the moral order.

3. *in place of commas or parentheses if meaning is clearer with dashes*

   There are shore deposits—gravel, sand, and clay—but marine sediments underline them.

ITALICS

Italics are type with letters sloping up toward the right. Italic type is used to differentiate physical appearance and to give prominence to words, phrases, and ideas.

Italic type is used

1. *for the legends of tables in some government publications*

   Table 26.—*Wood pulp: United States production for consumption and for sale in specified years*

2. *for run-in subheadings*

   Pulp produced for use and for sale.—The organization of the pulp using . . .

3. *for variety in presentation*

   REPORTS TO THE PRESIDENT
   Under the Rate Adjustment Provisions (Sec. 336) Cotton Cloth,
   Report No. 112, Second Series

4. *to introduce a resolution*

   That resolution reads as follows:

   Resolved, that the United States Tariff Commission under authority conferred by section 332 of the Tariff Act of 1930, is directed to investigate and report to the Senate all facts relating to wood pulp or pulpwood.

   Provided further . . . as used in a running text.

5. *to distinguish the names of plaintiff and defendant in legal cases*

   In the action of *State ex. rel. Grandina* v. *Ely,* a writ was issued.

   For example, we may cite the case of Tennessee Coal, *Iron & Railroad Co.* v. *Muscoda Local No. 123.*

6. *to indicate foreign words*

If the *modus operandi* offended, the remedy was with the people.

Weltwirtschaftswissenschaft is the German name for "world economics."

7. *to give variety to letter symbols indicating sections or subdivisions*

a.
b.
c.

8. *to identify titles of books, long articles and reports, book-length poems, motion pictures, newspapers, and periodicals*

The report, *Dehydrated Vegetables* . . .

The study published in the *American Economic Review* . . .

9. *to indicate scientific concepts in classical or foreign languages*

The *Heavea brasiliensis* tree in Brazil . . .

10. *to emphasize the most important phrases in a report*

The extent to which the court went in this case is well illustrated by the comment of Mr. Justice Jackson in the dissenting opinion:

Power should answer to reason none the less because its fate is beyond appeal.

APOSTROPHE

The apostrophe is used (1) to indicate an omission of one or more letters and (2) to denote the possessive case.

1. *Omission*

He belonged to the Princeton class of '23.

2. *Possessive*

Ninety-eight per cent of the world's rubber production was located in the countries controlled by these governments.

The practice of placing an apostrophe before the "s" used to form the plurals of figures, letters, and signs is declining. Forms omitting the apostrophe are gaining ground. Good form does *not* now require the insertion of the apostrophe.

The forecast predicts the quantity to be available in the 1960s,

Likewise the apostrophe, when such omission does not cause ambiguity, may be dropped in forming the plurals of exclamations, imperatives, conjunctions, adverbs, and abbreviations used substantively.

The *ohs* and *ahs* rippled through the audience.

The *dos* and *don'ts* of cattle breeding were discussed.

Her sentences were shattered by *ands*.

The *wheres* and the *whys* have been overshadowed by the *hows*.

BRACE

The brace is a curved line connecting two or more lines of print. Braces are convenient devices for use in grouping data for quick visual association.

$$\text{Wool}\ \left\{\begin{array}{l}\text{grease basis}\\ \text{scoured basis}\\ \text{washed basis}\end{array}\right.$$

BRACKETS

Brackets, always used in pairs, are editorial marks to indicate some comment on the text. They are used (1) to indicate a correction, a supplied omission, or an interpolation, and (2) to specify matter to be omitted from legislative bills.

The shipment arrived on the 23rd [22nd] of July.

The general [Clark] ordered dehydrated foods.

[. . . as may seem necessary for the public good; but the provisions of this section shall not be construed to include . . .]

CAPITALIZATION

Capital letters should be used economically. Capitalize

1. *proper names*

British Malaya	Africa
Netherlands Indies	United Kingdom
Latin America	Dutch interests

The committee, headed by *Lord James Stevenson,* proposed . . .

2. *the first letter in the first word of every sentence*

3. *derivatives of proper names when they are used with a proper meaning*

The audience expected a Wagnerian heroine, not a demure characterization from the pages of *Little Women.*

A large part of the production was in the hands of *British-owned companies.*

Wool used by that manufacturer is almost wholly from Australian sheep.

4. *a common noun or adjective when it forms an essential part of a proper name, but do not capitalize the common noun used alone as a substitute for name of the place or thing*

They are chiefly along Puget Sound, in the Grays Harbor and Willapa Bay areas, and in the Columbia River region.

But:

There was an excellent view of the sound, the harbor, and the bay.

A simple example should help you to remember the rule:

Massachusetts Avenue; but *the avenue*
New York State; but the state of Pennsylvania

5. *a common noun used alone as a well-known short form of a specific proper name*

the Capitol
the District (District of Columbia)
the Street (Wall Street)

6. *the word "the" when used as a part of an official name or title, but do not capitalize when "the" is used adjectively or when referring to newspapers, periodicals, vessels, airships, trains, firm names, and countries, unless the article is a part of the title*

British Consul v. *The Mermaid* (title of legal case) The Hague; but the Hague Court

the Times
The New York Times
The Atlantic magazine
the Associated Press
the Netherlands
the *Herald*
the *Saturday Review*

7. *the names of organized bodies*

The major part of the industry in the United States is organized under the Washington-Oregon Shingle Weavers District Council, an affiliate of the United Brotherhood of Carpenters and Joiners of America, which in turn is affiliated with the American Federation of Labor.

Most of the domestic mills are members of the trade association known as the United States Red Cedar Shingle Industry, Inc.; the Canadian Mills have their own organization, the Consolidated Red Cedar Shingle Association of British Columbia.

8. *the names of members and adherents of organized bodies, to distinguish them from the same words used merely in a descriptive sense*

    a Communist

    a Republican

9. *names of regions, localities, and geographic features when used as descriptive terms to denote definite areas*

    the Middle Atlantic States

    the New England States

10. *names of calendar divisions*

January	Monday
February	Friday

11. *names of holidays and historic events*

    Fourth of July

    Reformation

12. *trade names, variety names, and market grades*

    Ping-pong (trade name)

    Golden Delicious apple (variety name)

    Grade-A milk (market grade)

13. *any title or designation immediately preceding a name*

    Queen Elizabeth
    Mr. Evans
    Cardinal Spellman

14. *the full or short titles of books, articles, periodicals, reports, and chapters of books, except particles of three letters or less*

    Handbook of Business Letters

    "The Changing Culture of a Factory"

Do not capitalize

1. *a common noun or adjective forming an essential part of a name when it is removed from the rest of the name by an intervening common noun or adjective, the entire expression no longer being a proper noun*

    United States Army *but* the United States standing army

2. *a common noun used with a date, number, or letter, merely to denote time or sequence, or for the purpose of reference, record, or temporary convenience*

 Under Tariff Act of 1909 shingles were dutiable at 50 cents per thousand. The acts of 1913, 1922, and 1930 provided . . .

 An act of Congress effective July 1, 1940 . . .

 . . . page 5

 . . . treaty of 1918

 . . . in the twentieth century

 . . . the following chapter

 . . . war of 1914

 . . . as reported in paragraph 4

3. *the divisions of the year, such as* spring, summer, fall, *and* winter

REFERENCES IN FOOTNOTES AND BIBLIOGRAPHIES

The footnote plays an important part in every documented work. The reference mark is a superior number in the text, placed after the punctuation mark, without space.

The full citation of a book is the first style situation to master. This style varies from office to office, but the following formula provides a satisfactory standard.

[1] Zellig S. Harris, *Methods in Structural Linguistics* (Chicago: University of Chicago Press, 1951), pp. 19-21.

Observe that the first name of the author comes first, that the title of the volume is italicized and only major words capitalized, that parentheses enclose the place of publication, the publisher, and date of publication, and that the abbreviation for pages is not capitalized.

When notes are placed at the end of the book, the reference number is set on the line with the note, not as a superior number.

1. Zellig S. Harris, *Methods in Structural Linguistics* (Chicago: University of Chicago Press, 1951), pp. 191-92.

Many times writers in preparing their manuscripts refer to documents already cited by page and simple note such as *op. cit., supra, ibid.* As a general rule, editors prefer to have the full citation each time that it is referred to; the editor will then make such alterations as he wishes. When the same document is referred to more than once on the same page, however, *ibid.* may be used, followed by the page number.

When documents are cited in a bibliography, the number of pages in the volume may be given.

Harris, Zellig S., *Methods in Structural Linguistics*. Chicago: University of Chicago Press, 1951, pp. 384.

When the author's full name is given at the point of reference in the text, as Zellig S. Harris, for example, it is not repeated in the note. In such case the note reads:

Methods in Structural Linguistics (Chicago: University of Chicago Press, 1951), pp. 108-9.

If the full name of the author is not given, it must be stated in the footnote as a full citation.

Citations to periodicals are made in this way:

Arthur M. Cannon, "Significance of Auditing Statement 23 in Relation to Accountants' Liability," *The Journal of Accountancy* (November 1950), pp. 343-78.

References to newspapers are made like this:

The New York Times, January 8, 1952, p. 4. col. 3

Citation of law cases are made like this:

Connolly v. *Union Sewer Pipe Company*, 184 U.S. 540.

ADJUST STYLE TO PUBLICATION USAGE

Although general rules exist for punctuation, these rules vary by usage in different offices and publications. A writer must adapt style to usage by asking for a style book, if there is one available, or by studying written documents produced to get the peculiarities which are a part of the working habits of an office. The punctuation style as recommended in this chapter is based on the *Style Manual* of the United States Government Printing Office. *A Manual of Style* of the University of Chicago Press supplies much valuable information, and *The New York Times Style Book* gives the newspaper approach. The handiest reference is the section in *Webster's New Collegiate Dictionary,* "Punctuation, Compounds, Capitals, Etc."

READINGS

A Manual of Style. Chicago: University of Chicago Press, 1949.

CAREY, G. V., *Mind the Step*. Cambridge: University Press, 1948.

DORIS, LILLIAN and BESSE MAY MILLER, *Complete Secretary's Handbook.* Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1951.

GARST, ROBERT E., *Style Book of The New York Times*. New York: The New York Times Company, 1950.

PARKER, WILLIAM RILEY, *The MLA Style Sheet.* New York: Modern Language Association of America, 1951.

Style Manual. Washington: Government Printing Office, 1952.

VAILLE, REBECCA W. and MABEL VAN DUZEE, *How Shall I Punctuate It?* New York: Farrar & Rinehart, Inc., 1937.

"Punctuation, Compounds, Capitals, Etc.," Webster's New Collegiate Dictionary. Springfield, Mass.: G. & C. Merriam Co.

TRY YOUR HAND AT THESE •

- **to provide practice material for the application of punctuation principles**
- **to become aware of the role of punctuation in communication**
- **to develop punctuation habits related to the style of an office or publication**

1. The two paragraphs below are printed without capitalization or punctuation. Rewrite the material, using proper stops and capitalization.

   scattered showers with occasional thunder showers fell yesterday in the area between the plains states and the appalachians and there were isolated afternoon thunder showers along the gulf coast and in florida skies were clear to partly cloudy elsewhere afternoon temperatures were quite cool in the northeastern plateau and in the northwestern plains states there was little change in temperature in other areas of the nation

   a low-pressure area will center over western missouri this morning and a low-pressure trough will extend from southern california north to the canadian border another low-pressure through will center over northern minnesota relatively higher pressure will influence the weather in the rest of the nation an extensive high-pressure ridge will reach southeast from western quebec province across the northeastern united states

2. Organize the material below into sentences and paragraphs with proper punctuation.

   first of all speak distinctly to be understood it is necessary of course to speak distinctly you do this if you pronounce your words carefully giving proper formation to each sound in every word just try this open your mouth slightly and now hardly moving your jaw or tongue speak a few sentences you've heard people talk like that and probably had trouble understanding them they seem to have stiff jaws lazy lips sleepy tongues their words sound mumbled shut in or swallowed instead of being nicely formed and directed outward to the listener miss mousy miss dreary and miss myla minit are this type they are giving only a portion of their personalities to their listeners their friends could not be blamed for thinking that they do not care enough about them to speak clearly and distinctly

3. Draft a memorandum establishing the punctuation style to be followed in the manuscript of your long form career report.

Part Three

Part Three provides models of various structural forms of reports, all developed by the same process. Grouped by common characteristics the fifteen different types of reports discussed fall into six categories:

1. ORAL REPORTS

2. INFORMAL REPORTS
   - Letter
   - Memorandum Report
   - Information Report

3. TECHNICAL REPORTS
   - Technical Memorandum
   - Research Report
   - Long Form Report
   - Scientific Paper
   - Think Operations

4. ORGANIZATIONAL REPORTS
   - Staff Study
   - Public Information
   - Legislative Language
   - Organizational Writing

5. EXECUTIVE REPORTS

6. PERSONAL REPORTS

Classified according to function, reports fall into four categories:

1. PERIODIC—standard performance report issued at regular, stated, recurring times

2. PROGRESS—a report showing the measured degree of forward movement toward a stated objective; sometimes identical with periodic report

3. SPECIAL—a report which identifies and discusses some unusual problem that needs attention; in the broad sense, all research reports

4. ADVISORY—any routine report plus an analysis which provides the basis for special attention and action

The report models discussed are intended to be representative not inclusive. They show how the method of "report thinking" and "report writing" is applied to communication. Throughout the book, models presented in Part Three are cited and put to work in problem exercises.

13

SPOKEN REPORTS

MOST REPORTING TAKES PLACE BY WORD OF MOUTH. UNDER THE OPERATING pressures of the working day, men must face problems as they arise. They must make decisions at the point of action. Quick huddles, meetings, and conferences require clear thinking expressed in straight speech. The Glidden Company urges its personnel to develop the habit of "planned briefness" in verbal reporting. It calls attention to the "countless wasted hours" in business conferences and conducts a program to improve the quality of "verbal reporting." It defines "verbal reporting" as "any spoken exchange of business information between two or more employees." The training office points out that a verbal report is 90 per cent complete when a man knows beforehand what he wants to accomplish and then plans his strategy accordingly. To develop better "spoken reporting" Glidden advises:

1. Define the objective.
2. Plan and organize the facts.

3. Outline the presentation.
4. Be as brief as practicable.
5. Be as tactful as possible.
6. Hear your report through your listeners' ears.
7. Make definite recommendations.
8. Anticipate questions and objections; have your answers ready.
9. Work for a clear-cut decision.[1]

INDUSTRY'S CONCERN FOR SPEECH HABITS

Because oral reporting plays so large a part in the day's work, industry wants its people to pay attention to their speech habits. General Motors Corporation makes the Dale Carnegie course in effective speaking available to its management staff. It believes that the program helps employees to improve oral communication, to develop self-confidence, and to get along better with people. In a two-year period over 7,000 supervisory personnel took the course. Williamson Heater Company encourages speech practice from the foundry puddler up to the company president. Once men speak up inside the plant, says the Williamson president, they take part in trade, professional, and community meetings outside the factory. Opinion Research Corporation made a study of employee-management communication. It concluded that management must make increasing use of the spoken word in personal contact and employee meetings because workers like to "speak up." A United States conciliation expert says that industrial relations are improved by what he calls "ear, eye, and voice exercises." By this he means "spoken, face-to-face reporting." Incisive speech counts in industry!

DEVELOPMENT OF INCISIVE SPEECH

Clear-cut spoken reporting requires (1) an orderly mind, (2) tact, (3) good enunciation, and (4) the physical effort necessary to make the speech act effective. Almost every successful executive at some time in his career has undertaken a program of speech improvement. Such improvement comes from good coaching, practice, and hard work. The Army recommends three means for the development of effective speech habits. In summary it says:

1. *Cultivate critical understanding.* Observe the speech habits of others. See why the speech of some persons is good; why the speech of others needs improvement. Analyze the speech techniques employed by conference, platform, radio, and television speakers. Become alert to how others speak. Select a person with good speech habits as a model.

2. *Set standards for your own speech.* By a process of self-analysis, by encouraging friendly criticism from your associates, and by listening to

[1] Adapted from *Effective Expression* (Cleveland: The Glidden Company, 1954).

your own recorded speech, find out what your strengths are; work to make these stronger. Likewise identify your weaknesses; work to correct them.

3. *Practice good speech habits.* Consider every speech situation as an opportunity to demonstrate and to improve speech techniques.[2]

SPEECH EXERCISES

Incisive speech results from the proper use of the lips, the tongue, and the lower jaw. Any man can speak more distinctly if he will exercise his speech apparatus. The sounding of any particular note on a musical instrument requires a special position or action. The violinist must press his finger on the string at exactly the right point; he must draw his bow correctly. In the same way, there is a special position or action of the lips, tongue, or jaw for every sound used in speech. The lips sometimes close or take a slightly parted or rounded shape; the jaw moves up and down; the tongue vibrates in many positions. To form a sound correctly and to utter it distinctly one must perform the right mouth action. Through conscientious practice any man can improve his speech habits. These simple exercises will help:[3]

Exercise 1

Vowels. Stand before the mirror. Watch and listen to yourself while you pronounce the vowel sounds. Carefully note your mouth action while you say each vowel so that it sounds exactly right. The movements of the jaw necessary to produce the mouth positions specified below permit the tongue to take the necessary positions for the various sounds.

VOWELS	SOUNDED	AS IN	APPROXIMATE POSITION OF MOUTH
A	ah	father	Open
A	ay	ate	Half open
A	aw	call	Open, lips slightly rounded
A	a	hat	Half open
E	ee	he	Almost closed
E	e	met	Half open
I	eye	Kite	Open, then closing
I	i	it	Slightly open
O	o	hot	Open
O	oh	old	Open, lips rounded
U	oo	flute	Almost closed, lips rounded
U	uh	hut	Open
OI	aw-i	oil	Open, then closing

[2] "Techniques of Military Instruction," *Army Field Manual 21-6* (Washington: Government Printing Office, 1954), p. 53.

[3] The following exercises and practice sentences have been adapted from *Your Voice Is You* (The Bell Telephone Company).

Exercise 2

Consonants. Stand before the mirror. Continue the same procedure as in Exercise 1. Note that much more movement is required of the tongue and lips and that the teeth have a part. Unless spoken distinctly, consonant sounds may not be heard at all or may be easily mistaken for others.

BREATH CONSONANTS	VOICE CONSONANTS	NASAL CONSONANTS	FORMED BY
F	V		Lower lip against upper teeth
P	B	M	Lips
	W		Lips extended in circular position
	WH (as in "when")		Lips extended in circular position
T	D	N	Tip of tongue against upper teeth ridge
	L		Tip of tongue against upper teeth ridge
TH (as in "three")	TH (as in "then")		Tip of tongue back of upper teeth
S (and soft C)	Z (as in "maze")		Tip of tongue away from gums or teeth
SH	Z (as in "azure")		Tip of tongue drawn back.
	Y (as in "yet")		Sides of tongue touching upper back teeth
CH	J (and soft *G*)		Tip of tongue against upper teeth ridge
	R (as in "run")		Sides of tongue against upper back teeth
K (and hard *C* and *Q*)	G (hard)	NG	Back of tongue against soft palate
X (as in "ax")	X (as in "exact")		Same as *K* followed by *S*, or *G* followed by *Z*

Exercise 3

The tongue. With your mouth well open, curve the tip of your tongue upward to touch your gums just back of your front teeth. Return to normal. Repeat several times, gradually speeding up. Repeat, sounding "lah" each time your tongue is lowered. Again repeat, successively using the sounds "tah," "nah," and "lah."

Exercise 4

The lips. (a) Extend your lips forward in open circular form; then let them relax and return to normal. Repeat several times. (b) Starting with

your lips closed, puff them apart with the breath, as for the sound of "p" in the word "part," and repeat this rapidly. (c) Repeat, adding the various vowel sounds, in order, as "pah," "pay," etc. (d) Again repeat, substituting the "b" sound, as "bah," "bay," etc.

Exercise 5

The jaw. Drop the jaw, with muscles relaxed, far enough to permit you to insert two fingers between your teeth. Return mouth to closed position, and repeat several times. Repeat, sounding the syllable "mah" each time your jaw is dropped. Repeat, using the sounds "maw" and "moh." Avoid any forcing down or stiffening of the jaw. It should drop loosely.

Exercise 6

Oral reading. Stand before the mirror. Talk aloud. See how well you can use the correct mouth action in ordinary conversation. Read aloud with a conscious effort to use the lips, tongue, and lower jaw, using care to pronounce all the syllables and to give intonation and vocal inflection. Do not, however, permit your performance to become stilted, overmeticulous, or elocutionary. Strive for sincerity and warmth in communication. Continue to listen to your own voice as your practice, because the best "voice mirror" you have is your own ear. Ask yourself often: "How do I sound?" Be honest. Try out your speech on someone whose judgment you value. Ask for frank criticism.

Exercise 7

Sentence practice. Each of the sentences below contains a good mixture of vowels and consonants. Read the sentences aloud, slowly enough so that you give every sound its proper value and are conscious of your mouth action. These sentences will give your vocal apparatus an all-around exercise and at the same time emphasize some good ideas about the use of the voice. From your own reading add other practice sentences to your training list. Include some of the old standard tongue-twisters such as "Peter Piper picked a peck of pickled peppers" and "She sells sea shells." Such sentences will exercise stiff or lazy speech organs.

Here are a few practice sentences. Read them aloud before the mirror until you can repeat them rapidly, incisively and without affectation.

1. For distinct enunciation every word, every syllable, and every sound must be given its proper form and value.
2. Think of the mouth chamber as a mold in which the correct form must be given to every sound.
3. Will you please move your lips more noticeably?

4. The teeth should never be kept closed in speech.
5. As your voice is the most direct expression of your inmost self, you should be careful in using it to do yourself full justice.
6. You may know what you are saying, but others will not unless you make it clear to them.
7. Through practice we can learn to speak not only more rapidly but also with perfect distinctness.
8. Through conscientious practice good speech is within the reach of everyone.
9. The courtesy of face-to-face conversation, where the smile plays such an important part, can be expressed, over the telephone, only through the tone of voice and a careful choice of words.

Add your own sentences.

10.

11.

12.

CORRECT PRONUNCIATION

No speech error is more embarrassing than that of mispronunciation of words. Correct pronunciation results from constant effort to master words. In a speech improvement program a man needs to refer continually to the dictionary for guidance.

Much slovenly speech results from laziness and bad habits in syllabification. Slip-shod speakers (1) drop syllables, (2) add syllables, and (3) transpose sounds.
Here are examples:

1. *Dropped syllable*

   The word is *government.*
   Webster gives the pronunciation as *gŭv-ĕrn-ment*
   Mr. Syllable Dropper says "gov-munt."

2. *Added syllable*

   The word is *foundry.*
   Webster gives the pronunciation as *found'drĭ.*
   Mr. Syllable Adder says "foun-der-i."

3. *Transposed sound*

   The word is *perform.*
   Webster gives the pronunciation as *per-fôrm.*
   Mr. Sound Transposer says "pre-form."

VOWEL STRESS IN SYLLABLE SEQUENCES

One of the basic peculiarities of American speech rhythm lies in the wide variations of vowel stress in syllable sequences. Phoneticians say that vowels have a tendency to become "obscure" in the syllables of weakest stress. Good speakers pay attention to this "obscure vowel.' *Webster's Dictionary* indicates it in italic type, even though the accompanying diacritical mark suggests the full tonal value. Note the obscure vowel in the following words: tel*e*phone, *o*ccur, sof*a*, diffic*u*lt, welc*o*me.

BREATHING

A good speaker, like a good singer, gives careful attention to the development of proper habits of breathing. Like the beating of the heart, breathing continues throughout life as an involuntary physiological function. Normally at rest a man breathes between sixteen and eighteen times a minute. Practice in the effective use of the breath modifies the involuntary process to establish a pattern which supports the best speech performance.

Since speech is produced only during the process of exhalation, the understanding of the relationship of inhalation and exhalation becomes important. It is necessary to steady the exhalation as the breath is released to make sound. It is important to develop the habit of inhalation by expanding the lower part of the chest. Proper breathing for good speaking helps the person to develop good posture, firmness of the abdominal muscles, physical buoyance, and inner poise.

Three simple exercises will help the student develop good breath habits.

Exercise 1

Inhale deeply. Let the ribs spread out, but do not permit the breathing to take place by the elevation of the upper chest and shoulders. If such action takes place, the breathing is wrong. In proper breathing all 24 ribs move out as the diaphram contracts and flattens, allowing the lungs space to expand.

Exercise 2

Completely exhale all breath. Hold this state of deflation until the body, in some eight to ten seconds, demands inhalation. Then inhale deeply. Almost always the inhalation which follows will be the correct pattern. Repeat ten times.

Exercise 3

Inhale. Let the breath out with a hissing sound held constant and steady by breath economy. Then in succession inhale and exhale by sustaining the vowels sounds.

These three exercises tend to develop habits of breathing that will improve speech.

A LESSON FROM RADIO EXPERIENCE

News broadcasters can teach report writers a good deal about effective spoken reporting. When a commentator in five minutes reduces the news of the world to 650 words, he shows how concise and informative a well-organized spoken report can be. In adjusting news style to the oral report for the ear and not the eye, the United Press discovered these principles:

1. People speak more informally than they write. Spoken reports should therefore be phrased in smooth, simple, colloquial, everyday language for the ordinary man.
2. Each sentence should cover one simple thought in telegraphic style; the eye cannot regress to reread a spoken report.
3. Each statement should be clear; names should be repeated if personal pronouns leave antecedents in doubt.
4. Pause and vocal inflection take the place of punctuation marks.
5. Repetition and summarization keep listeners with the reporter; the listener cannot refer back.[4]

TELEPHONE REPORTING

The telephone is a common instrument of spoken reporting. All day long it makes possible two-way communication. Because one person hears but does not see the other person to whom he is talking, the quality of the voice and the enunciation of the words combine to create the impression of what a person is like. Voices over the wire are personalities. While in face-to-face conversation the speaker can create an intangible element in communication by gestures and facial expression. On the telephone he must rely entirely on his voice. As the persons engaging in the conversation develop ideas by statements and questions, they build attitudes of confidence, consideration, respect, and courtesy.

The Bell Telephone Company suggests this check list of contrasting sets of words to determine two kinds of telephone voices:[5]

[4] Summarized from Phil Newsom, *United Press Radio News Style Book* (New York: United Press Association, 1945).

[5] *Your Voice Is You.*

TELEPHONE REPORTING EVALUATION SCHEDULE

For each "Yes" give yourself 4 points
For each "Sometimes" give yourself 2 points
For each "No" score zero points

DO YOU	Yes	Sometimes	No
A. Mechanics			
1. Keep the cord free of kinks?	____	____	____
2. Check the number?	____	____	____
3. Listen for the dial tone?	____	____	____
4. Signal the PBX operator slowly?	____	____	____
5. Help the PBX operator?	____	____	____
6. Replace the receiver gently?	____	____	____
7. "Space" your calls?	____	____	____
8. Leave word when you are going out?	____	____	____
9. Take the message?	____	____	____
B. Courtesy			
10. Allow time to answer?	____	____	____
11. Answer promptly?	____	____	____
12. Ask if convenient to talk?	____	____	____
13. Greet the caller pleasantly?	____	____	____
14. Identify yourself properly?	____	____	____
15. Speak in a natural tone?	____	____	____
16. Explain waits?	____	____	____
17. Stay on the line?	____	____	____
18. Make your call brief?	____	____	____
19. Apologize for mistakes?	____	____	____
20. Say "thank you" and "you're welcome"?	____	____	____
21. End the call properly?	____	____	____
C. System			
22. Plan your points to be covered?	____	____	____
23. Keep a pad at hand for notes?	____	____	____
24. Ask questions tactfully?	____	____	____
25. Listen attentively?	____	____	____
26. Make your call brief?	____	____	____
	____	____	____
			TOTAL

Add up your total. If your score is 75 or better, you are on the right road to making friends by telephone.

Adapted from **HOW TO MAKE FRIENDS BY TELEPHONE.** ***American Telephone and Telegraph Company.***

Fig. 13.1

The voice having personal interest tone	The voice lacking personal interest tone
+ Pleasant	— Expressionless
+ Friendly	— Mechanical
+ Cordial	— Indifferent
+ Cheerful	— Impatient
+ Interested	— Inattentive
+ Helpful	— Repelling
+ PLUS PERSONALITY	— MINUS PERSONALITY

From their vast experience the telephone companies suggest some ways to make telephone conversation most effective. Figure 13.1 summarizes some of these recommendations.

CONFERENCES

Next to the telephone conversation the most common spoken reporting situation occurs in the informal conference. These sessions range from huddles called to deal with problems of the day to formal meetings scheduled by appointment or fixed by regular dates on the calendar. The success of a conference is advanced by clear statement of the subject under discussion and an outline of the items to be considered.

The Glidden Company sets up some standard values for conducting business conferences:

1. A conference should be planned.
2. It should be guided by an agenda.
3. Participants should know in advance of the meeting what will be expected of them, so that they can make proper preparation.
4. Each item on the agenda should be discussed in terms of completed staff work; i.e., analysis of the problem with recommended solution to which a "yes" or "no" answer can be given.
5. The conference should reach a decision on each item discussed.
6. The conference should be dynamic and progress from subject to subject under the guidance of the chairman.
7. Minutes of the conference should be typed and in the hands of participants within 24 hours after the conference adjourns.

INFORMAL CONFERENCES

In informal conferences scheduled by appointment the exchange of ideas is promoted if the person leading the discussion prepares on a convenient card, sheet, or memorandum a list of items to be taken up in the sequence of their importance or in the psychological order most conducive to effective consideration. When Edward R. Stettinius, Jr., was

Secretary of State, he always gave President Franklin D. Roosevelt an item list to guide their discussion. The President would check each item with his pencil as its discussion was completed, make notes around the various numbers, and jot down observations. A simple form to specify items to be taken up in an informal conference looks like this:

ITEMS FOR DISCUSSION

January 19

R. D. Smith and E. M. Jones

1.
2.
3.

THE USE OF THE AGENDA

In formal conferences, committee meetings, and board sessions where parliamentary form is customary, the agenda organizes the flow of work. An agenda is merely a plan for the business of the meeting with topics itemized in sequence as they are to be brought up. A simple form of agenda follows:

COMMITTEE ON FINANCE

Weekly Meeting—October 14

Agenda

1. Minutes of meeting of October 7
2. Report of investment counsel
3. Action on recommendations
    a. buy . . .
    b. sell . . .
4. Report of real estate counsel
5. Action on recommendations
    a. House and lot at 1711 May Street
    b. Commercial property at 2503 Decatur Street
6. Report of legal counsel
7. Other business

The agenda has been highly developed in international conferences, especially in the United Nations. Well before a session of the General Assembly, officers prepare a provisional agenda and submit it to members for their information. The provisional agenda of one regular session of the General Assembly, convening on October 14, was issued on August 15. It contained 65 items. Member governments have 30 days before the opening date to submit further items. On the basis of the provisional

agenda, the supplementary lists, and any requests for the inclusion of additional items, the General Committee reports a proposed agenda to the General Assembly, which adopts its own final agenda. Some such method of advance planning and provision for incorporating the desires of members is necessary in the preparation or plan for every successful meeting.

Here is an example of an item taken from the agenda of the General Assembly of the United Nations.

45. Appointments to fill vacancies in the membership of subsidiary bodies of the General Assembly:
    (a) Advisory Committee on Administrative and Budgetary Questions
    (b) Committee on Contributions
    (c) Board of Auditors
    (d) Investments Committee: confirmation of the appointment made by the Secretary-General
    (e) United Nations Administrative Tribunal
    (f) United Nations Staff Pension Committee

THE ANNOTATED AGENDA

For the guidance of members, the United Nations also issues an *annotated agenda* which includes *explanations* of the items proposed for consideration.

Here are two examples.

2. *Minute of silent prayer or meditation.*

   NOTE: According to Rule 64 of the rules of procedure, "Immediately after the opening of the first plenary meeting of each session of the General Assembly, the President shall invite the representatives to observe one minute of silence dedicated to prayer or meditation."

50. *Staff regulations of the United Nations. Questions of a probationary period: reports of the Secretary-General and of the Advisory Committee on Administrative and Budgetary Questions.*

    NOTE: The question raised under this item is whether there should be staff regulations which fix a probationary period for staff appointments. Reports on the subject by the Secretary-General and the Advisory Committee on Administrative and Budgetary Questions have not yet been issued.

The annotations commenting upon the items should be sufficient to inform the member of the nature, background, and scope of the subject.

E. I. duPont deNemours & Company operates at top level through an executive committee consisting of the president and nine vice-presidents. The committee meets each Wednesday, and oftener if necessary. The committee averages one meeting a month in a chart room where the per-

formance and forecasts of sales and earnings for each department are reviewed with the general manager. Each Friday afternoon, committee members find on their desks a series of reports which they must digest and master before Wednesday. The Wednesday meeting moves according to an agenda. The following agenda is typical:[6]

CHART ROOM

1. Fabrics and Finishes Department regular report for January.
2. Grasselli Chemicals Department regular report for January.
3. Photo Products Department regular report for January.
4. Pigments Department regular report for January.
5. Foreign Relations Department—annual report and operating budget.

COMMITTEE ROOM

Unfinished business

6. Engineering Department—operating budget.
7. Motion picture program based on the Company's programs re "How Our Business System Operates." Joint report from Advertising, Employee Relations, and Public Relations Departments.

New business

8. Organic Chemicals Department regular report for January.
9. Appropriation project covering partial design, procurement of long delivery equipment, and preparation of construction cost estimate New River Pump House, ash and waste retention facilities, Old Hickory Rayon and Cellophane Plants.
10. Appropriation project—replacement of worn-out pirns, Waynesboro Plant.
11. Credit appropriation—additional power facilities, Spruance Rayon Plant.
12. Appropriation—project for synthesis gas via coal partial combustion—Step #1, Belle Works.
13. Adjustment of permanent investment—QY catalyst facilities, Arlington Works.
14. Supplemental report on accomplishment—second year's operation—continuous polyvinyl alcohol and monomer process, Niagara Falls Plant.
15. History, present status, and future prospects of the "Elvanol" polyvinyl alcohol business. Report from Electrochemicals Department.
16. Miscellaneous items.

ORAL BRIEFING

Oral briefing provides a means for concisely presenting information necessary to understand a situation. The practice of briefing plays an important part in military, diplomatic, and industrial communication. The oral brief generally sets definite time limits to a presentation. It is rehearsed and edited for clarity and brevity. Often the briefing operation

[6] See "Management by Executive Committee," *Harvard Business Review* (May-June 1955), pp. 51-58.

is shared by a sequence of specialists, each of whom speaks authoritatively on his own field. The briefing sequence is explained to listeners by an outline which gives the whole picture of the presentation, the time schedule, the topics to be dealt with, and the name and position of the briefers. Such a briefing outline looks like this:

BRIEFING—MAY 26

Subject:

Time	Topic	Briefer	Position

PUBLIC SPEECH

On occasion spoken reports are made to general meetings. A public speech to a general audience raises problems in emotional reaction and oral style which differ from habits developed in smaller and more personal groups in the office. Nicholas Longworth, who became a distinguished speaker of the United States House of Representatives, found the mastery of the art of public speaking very difficult. Once asked how he became a public speaker, he replied: "Son, if you want to master the art, you've got to try at least seventy-five times." Audience fright disappears and ease develops with experience gained in actual speaking. Confidence comes from performance. Effective presentation of a report in a public meeting requires an orderly plan, a mastery of content, and good showmanship in delivery.

Human beings think in concrete, vivid, personal, and anecdotal terms. They do not live in the world of broad abstractions and generalizations. They will remember points to the extent that the reporter ties them to some human incidents which can be remembered and repeated.

The job of building a speech to communicate effectively an idea requires hard work. The speaker thinks his presentation through, writes it out, corrects it, times it, outlines it, "leaves his manuscript at home," and delivers his talk with an informality which comes from the mastery of his subject and the assurance of a well-ordered presentation.

One format which may be helpful in developing a report speech takes its point of departure from the colloquial phrase of "driving the point H-O-M-E." Here are the four steps taken in building a report to this formula.

1. **Headline.** Command the attention of the group by summarizing the report in one concise, arresting sentence.
2. **Outline.** Sketch briefly the ground to be covered, so that the listeners will know what to expect and why.
3. **Massline.** Illustrate and develop the points stated in the outline by vivid, concrete examples.

4. **Engine.** Propel the listeners toward a report destination. Summarize. Speak for a verdict. Vividly entrust a cause to the listener's care.

USE OF GESTURES

In making a public presentation a speaker should use the same kind of gestures which would come naturally in ordinary informal conversation. He should talk in the same conversational tone he would use in his own home. He should look the audience in the eye and speak to the whole room—every corner of it.

The movement to encourage clear oral reporting is growing to large proportions. Good speech habits develop logical minds, personal confidence, and understanding. They produce effective relationships among human beings because they help to make the communication of ideas simple, direct, diplomatic, and productive.

TECHNIQUES OF SPOKEN PARTICIPATION

Mature habits of spoken participation are becoming necessary for leadership. Harold F. Smiddy, vice-president, Management Consultation Services, General Electric Company, observes that "a business continues to exist as a dynamic organic entity only so long as it is able to find within itself the resources of continuing imagination, increasing knowledge, and developing skills." To a large degree such spiritual resources emerge from grown-up habits of behavior in groups. Research into group productivity begins to define a type of leadership which encourages optimum group performance. The substance of findings about the "new leadership" may be summarized like this:

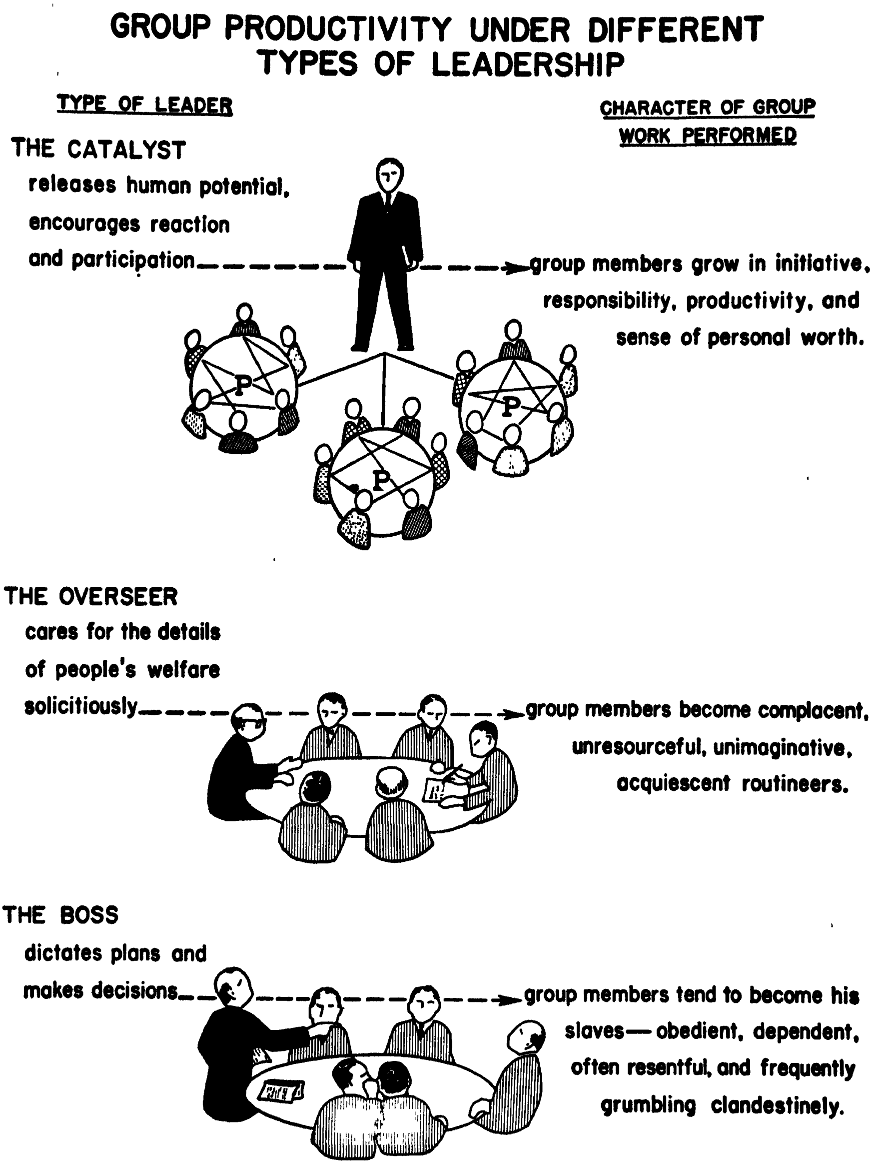
> By the discovery, development, and putting to work the varied competencies of people, the productive leader operates to define and to achieve group goals through the involvement and participation of people. By helping people to feel free and be responsible, mature leadership widens the base of initiative conducive to progressive growth and achievement. It encourages each person at the point of his own performance to think his best, speak his best, do his best, and be his best. Leadership of this quality works to build a group culture which is responsive to positive change and which, as Smiddy says, generates within itself the "resources of continuing imagination, increasing knowledge and developing skills."

The relationship to group productivity under different types of leadership is visualized in Figure 13.2.

In business conferences the task requires the exploration of a problem to arrive at the one best course of action. To the development of this program every human being around the table has a somewhat unique ap-

proach and contribution. Figure 13.3 pictures the process of exploration, analysis, discovery, and synthesis which continually takes place.

To arrive at the best answer, the group members need to have mature habits of dealing with their differences. Probably the most important concept of ways to develop new strengths out of divergencies is that of



From Douglass, THE GROUP WORKSHOP WAY *(New York. Association Press, 1956)*

Fig. 13.2

HOW DISCUSSION MULTIPLIES RESULTS

EXPLORATION

1. Group meets.

ANALYSIS

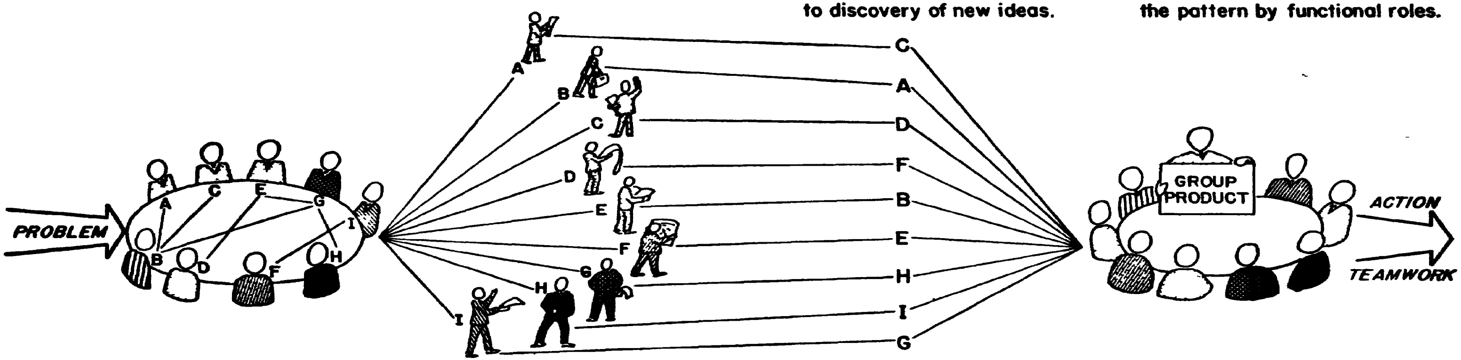
2. Members take situation apart.

DISCOVERY

3. Analysis "unfreezes" opinions and opens up minds to discovery of new ideas.

SYNTHESIS

4. Group puts situation together again and organizes the pattern by functional roles.



Each member sitting around the table is different from every other. Each sees the part of the problem which interests him in terms of his own experience and outlook. His facts and opinions collide with those of other members. The result promotes a thorough exploration from many different points of view.

One by one, members of the group take the situation apart, piece by piece. Each contributes from his experience. All learn from each.

Members become aware of the fact that no one person has all the answers, that each person's idea alone is inadequate and incomplete, that fragments of ideas given by all join to produce a more perfect design than any one member could develop. The pattern is theoretically equal to the total of the best thought of each member. New facts put wrong ideas aside and start minds moving in new directions.

Session ends with members in possession of more adequate idea of the problem. The situation has been "dismantled, restructured, and reassembled." Members in the process change and grow. Learning becomes "action," and decisions have group sanction, each member identifying himself with the new pattern. Steps to attain the agreed-upon goal are assigned to members as their work in the solution of the problem.

From Douglass, THE GROUP WORKSHOP WAY *(New York: Association Press, 1956)*

Fig. 13.3

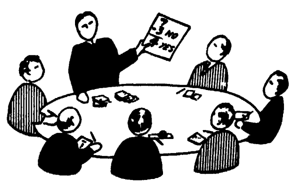
USING CONFLICT CREATIVELY
How Integration Develops New Strengths Out Of Previous Divergencies

WAYS OF USING CONFLICT

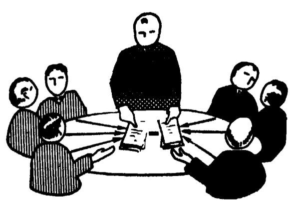
METHOD OF SETTLEMENT — KIND OF PRODUCTION

1. DOMINATION — Victory to one side, defeat to the other; often resentment crystallizing into revenge.

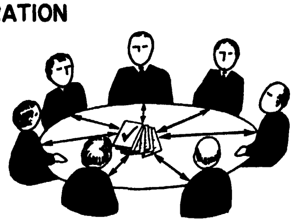
2. ARITHMETIC — Decision by the "numbers racket."



3. COMPROMISE — Each one gives up something he values and trades it for something he can accept.



4. CREATIVE INTEGRATION — Discovery of best in all and multiplication of strength from previous divergencies; all come out with more.



From Douglass, THE GROUP WORKSHOP WAY *(New York: Association Press, 1956)*

Fig. 13.4

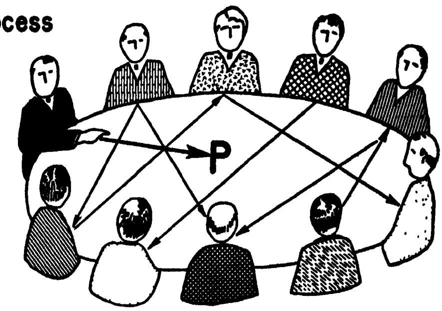
"creative integration." As this concept is described in Figure 13.4, it becomes apparent that a larger factor emerges from "using conflict creatively" than can be found in decisions arrived at by less mature approaches.

Around the business conference table, participants require at least ten types of functional participant skill. In the course of a meeting the same

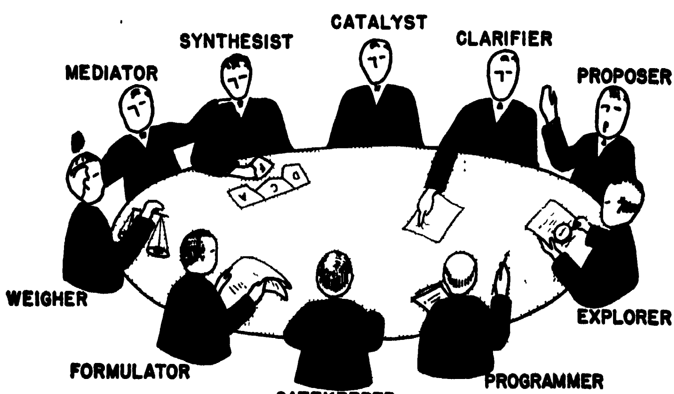
ROLES IN MATURE CONFERENCE GROUP

Functional participant skills encourage each member to give his best and bring out the best in others.

The *Catalyst* speeds up the process of productive interaction.



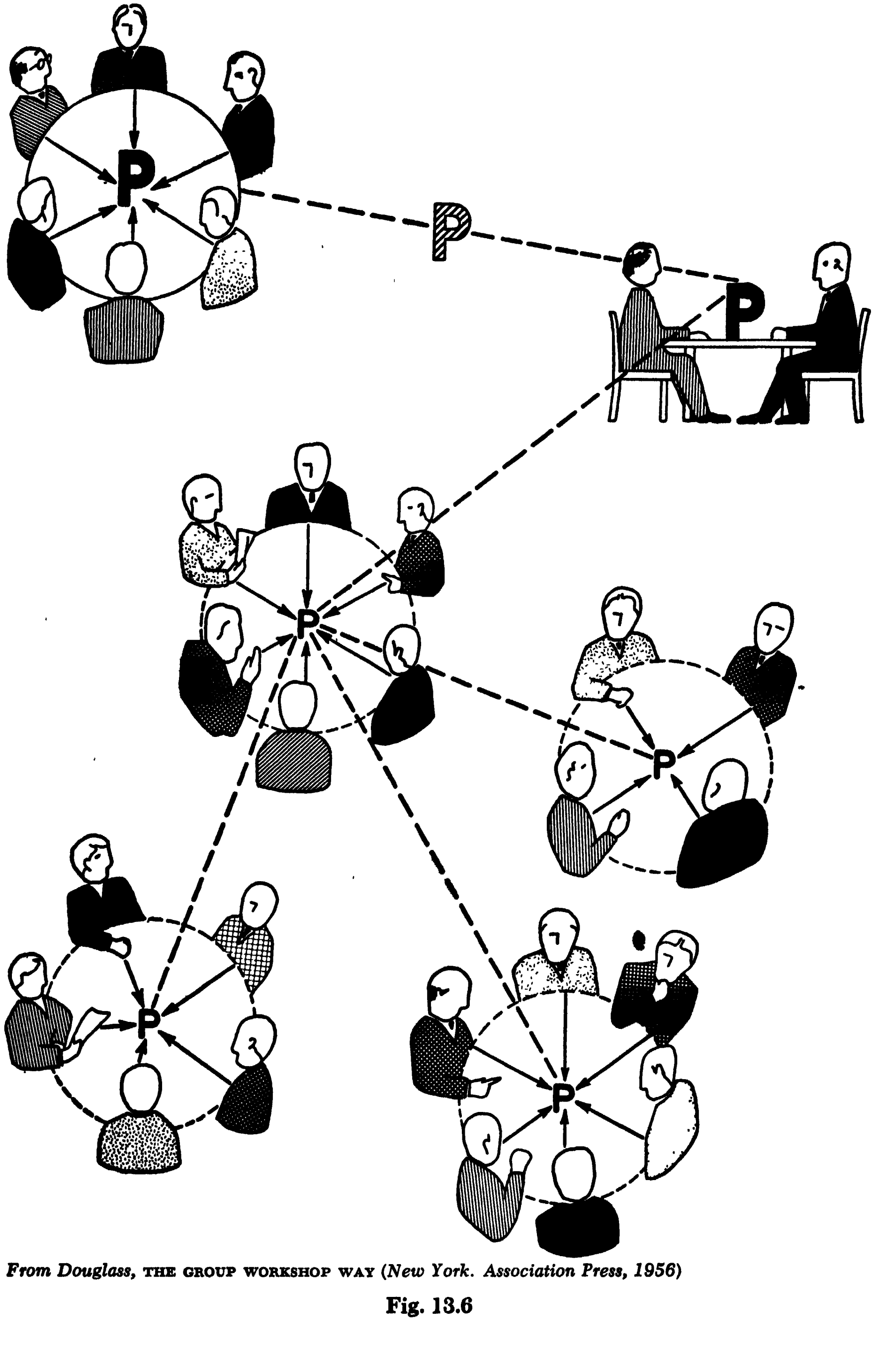
In the course of a meeting the same member may assume all the conference roles. He demonstrates mature skill by his ability to shift roles for the purpose of sustaining the quality output of the group.



From Douglass, THE GROUP WORKSHOP WAY *(New York: Association Press, 1956)*

Fig. 13.5

PROBLEM-CENTERED GROUP BEGETTING OTHER TASK FORCE PROGENY



From Douglass, THE GROUP WORKSHOP WAY *(New York. Association Press, 1956)*

Fig. 13.6

member may assume all the conference roles. He demonstrates mature conference skill by his ability to shift roles for the purpose of sustaining the quality output of the group. In any effective conference, a participant pattern something like that visualized in Figure 13.5 takes place. A problem is placed before the group by the "proposer." This issue is examined by the members acting as "explorer." Aspects of the problem and proposal not clear are explained by questions asked by group members functioning in their role as "clarifier." The "mediator" seeks to iron out differences of opinion, looking toward creative integration. The "weigher" balances risks against costs, value against value, while the "synthesist" attempts to state the emerging consensus of the group mind. The "catalyst" performs the special role of seeing that every member is encouraged to contribute his best at points where participation can be most helpful. As the consensus of the conference takes final form, the "formulator" states the common understanding and the "programmer" works toward a plan of action. During the whole discussion the "gatekeeper" has been performing his function: to see that the quality output of the group is sustained by mature functional participation.

Grown-up habits of spoken reporting make their contribution to that major responsibility: *how to make a business decision.* Since the end of World War II vast progress has been made in the understanding about the "decision-making process." That process proceeds by these four basic steps:

1. *Defining the problem:* What kind of problem is it? What is its critical factor? When do we have to solve it? Why do we want to solve it? What will solving it cost?
2. *Defining expectations:* What do we want to gain by solving it?
3. *Developing alternative solutions:* Which of several plans offers the surest way to avoid things that are unexpected?
4. *Knowing what to do with the decision after it is reached.*[7]

Men who understand the role of spoken reporting in manager development for business leadership have need, Smiddy points out, "for a philosophy which will light a path so that men . . . may be helped . . . to learn and to find how to:

- Gather and weigh information
- Plan and organize and delegate
- Integrate resources and objectives
- Exercise judgment in making decisions
- Measure their own performance fairly
- Be willingly accountable for their success in attaining chosen and

[7] Peter Drucker, "How to Make a Business Decision," *Nation's Business,* April 1956. Reprint.

INDIVIDUAL ADVANCEMENT OF WORK PRODUCTIVITY OF GROUP

	C Scale: 0 10 20 30 40 50 60 70 80 90 100 H Scale: 100 90 80 70 60 50 40 30 20 10 0	
Unfocused idea of subject		Clarified subject
Expressed opinions		Sought facts
Dribbled unrelated questions		Asked forwarding questions
Just talked		Reflected
Quibbled		Analyzed
Impulsive		Disciplined self
Rude		Appreciated others
Obstructed		Integrated
Manipulated		Explored toward concensus
Dominated		Formulated consensus into tentative action plan
Scapegoated		Tended gate

From Paul Douglass, THE GROUP WORKSHOP WAY *(New York. Association Press, 1956)*

C Scale: contributing
H Scale: hindering

SPEECH PROFILE FOR INDIVIDUAL EVALUATION

			Low 4	Quartiles 3	2	High 1
PITCH	Level too high	1				
	Level too low	2				
	Monotony	3				
	Pitch pattern	4				
	Other	5				
TIME	Rate too rapid	6				
	Rate too slow	7				
	Staccato phonations	8				
	Prolonged phonations	9				
	Monotony	10				
	Jerkiness	11				
	Faulty phrasing	12				
	Time pattern	13				
	Other	14				
LOUDNESS	Level too loud	15				
	Too weak	16				
	Monotony	17				
	Too flexible	18				
	Loudness pattern	19				
	Other	20				
VOICE QUALITY	Nasality	21				
	Breathiness	22				
	Harshness	23				
	Hoarseness	24				
	Other	25				
ARTICU-LATION	Generally inaccurate	26				
	Fricatives inaccurate	27				
	Substitutions	28				
	Voicing errors	29				
	Distortions	30				
	Slighting	31				
	Omissions	32				
	Other	33				
COMPLEX ATTRIBUTES	Mispronunciation	34				
	Faulty emphasis	35				
	Too even stress	36				
	Affectation	37				
	Regional dialect	38				
	Foreign dialect	39				
	Other	40				

____________________ Name   ____________ Date

Adapted by permission from Grant Fairbanks, VOICE AND ARTICULATION DRILLBOOK *(New York Harper & Brothers, 1940).*

desired results, primarily through the work of others rather than by purely personal performance.[8]

The American Management Association reports the results of a survey of 51 presidents of leading companies. The overwhelming majority testified to the need for skill in *oral* communication![9]

PROFILE DEFINITIONS

ARTICULATION	The whole movement and adjustment of the speech organs necessary to pronounce a particular sound.
LOUDNESS	Magnitude of auditory sensation resulting from (1) the amplitude of excursion of the vocal cords and (2) the amount of amplification of the tone by the resonators. *Voice and Articulation Drillbook*, pp. 191-200.
PITCH	Degree of height (acuteness) and depth (gravity) of a voice, depending upon the relative rapidity of the vibrations by which the tone is produced. Habitual pitch level is the pitch level used most frequently by a given speaker. *Voice and Articulation Drillbook*, pp. 165-190.
PRONUNCIATION	The manner of uttering words, the essential of correct pronunciation being (1) correct articulation of the speech sounds, (2) articulation of all the speech sounds, (3) articulation of only the required speech sounds, (4) correct location of accent or syllabic stress. Characteristics of mispronunciation are (1) the substitution of a sound, (2) the omission of a sound, (3) the addition or insertion of a sound, or (4) the misplacement of an accent. *Voice and Articulation Drillbook*, pp. 105-106.
TIME	Duration of tones and pauses and the arrangements in which they occur along the time dimension. *Voice and Articulation Drillbook*, pp. 140-164.
VOICE QUALITY	Attribute of tone determined by composition of the sound wave and enabling discrimination between two sounds alike in pitch, duration, and loudness, yet different. *Voice and Articulation Drillbook*, pp. 201-217.

Numbers after each definition refer to pages in the *Drillbook* for the further guidance of the reader.

[8] Harold F. Smiddy, *General Electric's Philosophy and Approach for Manager Development* (New York: American Management Association, 1955), p. 9.

[9] M. Joseph Dooher and Vivienne Marquis, eds., *Effective Communication on the Job* (New York: American Management Association, 1956), pp. 17-18.

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16 mm. black and white, sound. National Training Laboratory in Group Dynamics, 1201 Sixteenth Street, N. W., Washington 6, D.C.

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Conference Planning
Our Invisible Committees

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TRY YOUR HAND AT THESE •

- **to work with your own speech**
- **to develop a critical awareness of good speech**
- **to improve the impression you make upon others when you speak**

1. In turn, have each member of the group read the practice sentences on pages 209-210. During such oral reading, have the other members evaluate the performance by use of the *Speech Profile* on page 227. At the conclusion of the reading, call upon one member to make a verbal critique of the performance on the basis of his evaluation.
2. Develop a plan for an oral briefing session. Prepare the outline for the listeners. Select your own subject. If you prefer, assume that management wishes to review by oral briefing the report on the market for the product discussed in Chapter 2.
3. Prepare and deliver a three-minute oral report based on the book by Ivor A. Richards, *How to Read a Page.* Use the formula for a general report talk given on page 218.

14

LETTERS

THE LETTER IS THE OLDEST, MOST DIRECT, AND MOST PERSONAL OF ALL forms of written communication. Earnest research attention is constantly devoted to its structure, content, and use. Modern management is so concerned with its improvement that the adjective "better" has been as firmly attached to the noun as "bon" is to "voyage." The letter is the report writer's primary vehicle for the interchange of information.

Industry's concern for better letters stems from two sources. First, it wants to make letter communication more effective. Second, it faces the necessity for cutting office expense. New York Life Insurance Company studies show that each letter dropped in the mailbox costs about $1.05. Is it any wonder that cost-conscious executives insist that the indispensable letter must do more work for less money?

A GOOD LETTER

1. is easy on the eyes

a. *friendly and attractive when opened*

b. *displayed on the page to give the reader the most information in the shortest reading time*

c. *developed to guide the reader's eye from part to part*

2. is mechanically perfect

a. *accurate in statement*

b. *correct in spelling*

c. *correct in grammar*

d. *neat in presentation*

e. *satisfactory to the writer's own critical standards*

f. *adequate for a tangible file record*

3. speaks to the reader

a. *makes the reader's problems the writer's own*

b. *comes quickly to the point*

c. *is accurate and complete*

d. *gives the reader the information he needs in the order of his interest; covers completely all the points in the reader's mind*

e. *commands in the opening sentence the reader's attention*

f. *maintains rapport in the body by lucid and accurate text*

g. *uses diction which is natural, unlabored, and idiomatic*

h. *closes with original, friendly, and positive words*

4. carries a clear message

a. *expresses ideas in simple, ordinary words*

b. *arranges ideas in orderly sequences*

c. *is clear, complete, convincing, brief, to-the-point, and makes every word count*

d. *uses words which are fresh and original; avoids clichés, rubber-stamp words, and commonplace expressions*

5. is emotionally positive

a. *natural and conversational, like the writer's speech*

b. *alive, sincere, warm, friendly, good-natured, courteous, and thoughtful*

c. *tactful, stating ideas in the happiest way*

d. *faithful to feeling, reaching deeply into the resources of the inner man*

e. *true in tone, to communicate what the writer intends*

f. *creates confidence*

Fig. 14.1. Qualities of a good letter

6. is timed right

a. *prompt in preparation*

b. *posted to meet mail schedule*

c. *planned to arrive on the reader's desk on a day when it will obtain his maximum attention*

Fig. 14.1 (*cont.*)

INTERNATIONAL ANONYMOUS CORPORATION
400 Michigan Avenue
New Hope 22, N. Y.

World Headquarters — Telephone Bryn Mawr 3-1900

September 5, 195x

The Anonymous Corporation — Air Mail
111 Main Boulevard
Winslow, California

Attention Mr. Arnold Andrews

Dear Mr. Andrews: Standard Pure Block Letter Style

Of course the arrangement of the letter on the page has much to do with the impression which the communication makes upon the reader.

I am therefore delighted to summarize a few of the principles which we have found helpful in effective correspondence. For visual demonstration I am writing this two-page letter to you in pure block style. This format has the advantage of neatness and economy since the typist can throw her carriage to the left-hand margin upon the completion of each line.

Cost-conscious executives like the pure block style because it reduces the cost of letter writing. When I tell you that a letter dropped in the box in New York costs something like a dollar, you can see that any improvement in the speed of typewriting letters saves a company money. Alfred P. Sloan, Jr., chairman of the board of General Motors Corporation, says that sometimes an idea can be substituted for an expenditure. Pure block style is such an idea in letter writing

In planning a letter for a page a writer's first decision relates to spacing. The margins are most important because they actually frame the text of the letter like a picture. In a standard letter covering one or more pages the left and right margins, as you will see by this letter, are usually about an inch and a quarter wide.

The inside address comes flush with the left margin an inch and a quarter from the left edge of the page and three spaces down from the date. When the letter is written to a firm but is directed to the special attention of an official, this line follows the inside address by two spaces and likewise precedes the salutation by two spaces. When there is no "Attention" line, the salutation follows the inside address by two lines. Likewise the salutation is separated from the body by two spaces

When the letter is sent by air mail, special delivery, or as registered mail, the fact should be stated at the right beneath the date and opposite the first line of the inside address. The same notation should be made on the file copy and on the envelope.

Fig. 14.2. Pure block style letter

FUNCTIONAL STRUCTURE OF A LETTER

As a form of communication the letter has developed a definite, conventional structure through the arrangement of seven of its parts.

1. The *heading* tells who the writer is or represents, what he is, and where he is.
2. The *date* specifies the time when the letter was written.

Mr. Arnold Andrews, Training Director
The Anonymous Corporation -2- September 5, 195x

Often the subject of the letter is stated in the center of the page on the same line with the salutation. It is generally typewritten in capital letters, although some writers prefer capital and lower case.

The body of the letter follows two lines below the salutation. Sentences within paragraphs are typewritten in single space, but double spaces separate paragraphs. Experience shows that a first paragraph which does not exceed three lines welcomes the reader to the communication. It is good practice to keep paragraphs within a length of six or eight lines.

Some firms such as Price Waterhouse & Co. think that readability is improved if two spaces follow each period before the beginning of a new sentence.

A bottom margin of not less than an inch should be left at the bottom of the first page of a two-page letter. The reader thus moves from one page to the next in a very natural way.

For record purposes the name and connection of the addressee should be typewritten in the upper left-hand corner of the second and subsequent pages. The number of the page should be given in the top center of the sheet, and the date should be restated at the right.

When quotations are included in the text, they should be placed in quotation marks and set off two lines from the matter which precedes and follows.

In a pure block style letter the complimentary close begins two spaces down from the last line of the body of the letter and flush to the left margin.

I am sure that you will not think from these suggestions that letter-writing standards are ironclad molds. The design of a letter changes somewhat from company to company. The important principle is that a writer should follow some definite pattern and present his ideas clearly, forcefully, and tactfully.

All of us in Anonymous will appreciate having you share with us your experience in our common interest of better letters more economically produced.

Very truly yours,

John A. Adsit

John A. Adsit
Office Methods Supervisor

JTC: rja
Enclosure

Fig. 14.2. (*cont.*)

3. The *inside address* indicates the firm or person to whom the letter is written, so that anyone placing the letter in an envelope or opening it upon receipt can tell for whom the communication is intended.
4. The *salutation* provides a word of courteous greeting.
5. The *body* of the letter contains the message. It is the part which follows the salutation and precedes the complimentary close.
6. The *complimentary close* represents a polite leave-taking.

NEW YORK LIFE INSURANCE COMPANY

51 Madison Avenue, New York 10, N. Y.

SURRENDER VALUE DIVISION

FRED A BOPP
SUPERINTENDENT

June 15

Mr. Louis A. Munsey
California Oil Company
515 Fifth Avenue
New York 17, New York

Dear Mr. Munsey: Policy 6 629 566

I am glad to reply to your letter of April 5, which has been referred to us by Agent Howard Gollard.

Under the existing State and Federal income tax regulations this Company will not be required to file an information return. The reason for this is that the amount you received in excess of the premiums paid does not exceed the minimum statutory limitation of $600 Federal and $1000 for the State of New York.

The total excess you received over the cost of the insurance in 1950 was $457.85. This is how it was calculated:

Matured Endowment		$2520.00
Gross Premiums Paid	$2062.15	
Less:		
Net Premiums		$2062.15
Excess over Premiums paid		457.85

It has been a pleasure to be of service to you.

Sincerely yours,

Fig. 14.3. Modified block style letter

7. The *signature* represents the stamp of authenticity given to the letter by the writer.

MECHANICAL STRUCTURE OF THE LETTER

In mechanical structure a letter can be displayed on the page in one of four forms of presentation: (1) pure block, (2) modified block, (3) indented,

AIR MAIL

TOM JONES & CO.

40 HENRY STREET

NEW YORK 5

July 1, 195

John Walters Associates
10 Elm Street
New York 5, N.Y.

Dear Sirs:

CORRESPONDENCE

This is a standard form to be used when typing a full-page letter.

The address should begin at least two spaces below the date line and the margin should be set so that the letter will be well balanced on the page. The width of the margin is determined by the length of the letter but the line of writing should never come outside of the line of print in the upper left-hand corner of the letterhead.

Indent paragraphs ten spaces from the left-hand margin. The lines should be uniform in length and a dictionary should be consulted if you are not sure of the proper division of a word. All full-page letters are to be single spaced with a double space between paragraphs. Follow each period with two spaces before commencing the next sentence.

Never release a letter with a visible erasure. If words are to be deleted or changes are made after a letter has been completed ALWAYS retype. Your letter reflects the firm's standard and a letter with untidy erasures, uneven margins, fuzzy type or poorly balanced setup should not be released for signature.

Always proofread a letter as soon as it has been typed. Type a suitable envelope or label, depending on the length of the letter and the number of enclosures.

The complimentary close, preferably "Yours very truly," should be written midway between the margins and two spaces below the last line of the letter. Leave at least an inch at the bottom of the page for the signature.

Yours very truly,

Tom Jones Jr.

Tom Jones, Jr.
Director of Public Relations

TJ;ob

Fig. 14.4. Modified block style letter

and (4) hanging paragraph style. Figure 14.2 gives a pattern of the standard pure block letter. The message in the model describes the technique of its construction. This format has the advantage of neatness and economy. Since the typist can throw the typewriter's carriage to the left-hand margin upon the completion of each line, every line is built against the vertical left-hand margin. Although this form is most convenient for the typist, some writers feel that the heaviness and lack of balance of the pure block can be avoided by the use of the modified block.

The modified block style, shown in Figure 14.3, builds the inside address and salutation flush with the left-hand margin but begins each paragraph with uniform indention of perhaps five to ten spaces. This style is widely used. It combines economy in mechanical transcription with pleasing physical appearance. It gives white space at the beginning of paragraphs. Indentations organize ideas within the body of the message.

In the modified block style the complimentary close and the signature are usually centered below the message or moved slightly to the right of center.

The indented style moves each succeeding line in the inside address an equal space to the right in this fashion:

```
xxxxxxxxxxxx
   xxxxxxxxxxxx
      xxxxxxxxxxxx
```

Indented style does not make as clean-cut an impression as either the pure or modified block. Although it is sometimes referred to as "official style," its use slows up the work of the typist.

The hanging paragraph style, an example of which is given in Figure 14.5, is used chiefly in letters that attempt to be different. The first line of each paragraph begins flush with the left margin, but subsequent lines are indented. In all other particulars the hanging paragraph letter follows the pure block style. The first paragraph line, from which the other lines are hung, is characteristically designed to present the key idea for visual emphasis.

REVOLUTION ON THE FUNCTIONAL AND MECHANICAL FRONT

In recent years letter specialists have been carrying on a revolution on the functional and mechanical letter front. They experiment with new arrangements. They question traditional forms. Of what value, they ask, are the salutation and the complimentary close? Will not their omission increase efficiency and save expense? Have not these two parts of the letter become stereotyped and meaningless? Does the letter not develop more strength, informality, and "punch" when the beginning words read

right into the message? Whenever two professors of letter writing get together there is always sure to be an argument over the issues.

Back in the fall of 1942 the executive committee of the National Office Management Association suggested a model of what it called the "simplified letter." Drafted in pure block style, it eliminated, among other changes, the salutation and picked it up, for all practical purposes, in the first line of the message in the body of the letter. It absorbed the com-

ALGONA PRODUCE COMPANY

56 SPRUCE STREET

ALGONA, IOWA

January 25, 195x

Mr. Waldo Haldeman, Buyer
American Stores Company
424 North 19th Street
Philadelphia 30

Why, Waldo, after all these years are we having this fuss
about A-grade eggs for the Philadelphia market? I'm
worried and want you to tell me what this new drive
means to our producers out here.

I want to keep shipping to the American Stores Company
as you well know. Tell me what this new deal in eggs
expects from us in Iowa.

John

John Dressman

Manager, Algona Produce Company

Fig. 14.5. Hanging paragraph style letter

plimentary close into the last sentence of the letter body. A food engineer made effective use of the general pattern of the simplified form in the effective reporting letter shown in Figure 14.6. In making use of the newer forms of letters, however, the writer should use good judgment and good taste. He should think of the reaction of the recipient.

TELEPHONE LOCUST 7 4000

CABLE ADDRESS ASCO PHILA
A B C CODE 5 - EDITION
SPEEDKODE

AMERICAN STORES CO

GENERAL OFFICES
424 N NINETEENTH STREET
PHILADELPHIA 30, PA

January 29, 195

Mr. John Dressman, Manager
Algona Produce Company
Algona, Iowa

AIR MAIL

Dear John:

EGG QUALITY TRENDS

"Why all this fuss about Grade A eggs for the Philadelphia market?" Your question raises a subject which I want to write about for the good of the whole industry.

Since the United States Department of Agriculture issued its chart entitled Know the Eggs You Buy, thousands of high school home economics students and their mothers know what qualities to expect in a Grade A egg. As our home economist Marian Kemp, says:

> "When the albumen runs like water over the pan and the yolk does not stand up, women today recognize that the egg has poor quality."

To build our egg consumption each year, we must work together to give the American housewife the kind of egg she has learned to want.

American Stores Company as a matter of policy buys eggs to meet the high standards our customers demand. Eggs which we deliberately try to avoid buying have one or all of four defects. Let me tell you briefly about each.

1. Weak shell structure. White eggs produced in our eastern states have "paper" shells and are very brittle. Western whites have slightly firmer shells but are gradually approaching the poor texture of eastern eggs.

2. Watery albumen. The thick layers are gradually becoming less dense, the thin layers are becoming greater in volume and more watery, and some eggs have albumen with a greenish tint.

3. Weak yolks. In white-shelled eggs the yolk's skin is gradually weakening, is less elastic, and breaks much easier than years ago. Mottled yolks seem to be more prevalent.

4. Blood spots. The quantity of eggs containing blood and meat spots seems to be on the increase. At three different egg-laying contests records were kept on 2,000 layers.

Fig. 14.6. Letter with high readability

REPORT WRITER'S PERSONAL LETTER FORM CHOICE

From the various types of letter forms, the report writer is at liberty to choose the one which most appeals to him. Once he has made his choice, he needs to stick to it. Letter style becomes as much of a personal characteristic as the kind of haircut a man orders.

Mr. John Dressman, Manager -2- January 29, 195
Algona Produce Company

A startling result was that only 55% of the eggs were entirely free from blood and meat spots.

What do these trends mean to buyers? They compel us to take two steps - (1) to procure our supply from flocks which are known to produce Grade A eggs, and (2) to encourage the breeding of birds which lay eggs with strong shells, firm yolks, and thick albumen.

This information, I hope, will help you to buy more selectively from farmers for shipment to us. By working together for the highest market standards, we can push up the demand for eggs and hold prices firm for our mutual good.

Let's get together at the American Institute of Poultry Industries next week in Kansas City and talk some more about "our" marketing problem.

Very truly yours,

AMERICAN STORES COMPANY

Waldo Haldeman

Waldo Haldeman
Buying Department

Our Kansas City date is for February 16.

Enclosure - 4

Copies of letter - 2
Egg chart - 1
Bulletin 411 - 1

Fig. 14.6 (cont.)

DRAFTING THE BODY OF THE LETTER

Of all seven parts of the letter the body is of course the most important. It carries the message. And it is the construction of the message that gives management its chief concern. The real problem is the way men say things. The New York Life Insurance Company advises its staff that "an effective letter tells the reader clearly, completely, and concisely what he wants to know and leaves with him a favorable impression of the writer and of the company. A New York Life letter should perform two functions: (1) it should serve as a medium for transmitting information in a clear, complete, and concise manner; (2) it should serve to make new friends for the Company and to increase good-will between the Company and its old friends." Earle Buckley holds that every letter written is a sales letter. In drafting it the writer should "unbend." He should phrase his message in just a little friendlier way and add a touch which will make the recipient feel just a little closer to the company. Long before the big push for better letters gathered momentum, Comte de Buffon gave permanently good advice when he said that to write well one must be in

> full possession of his subject; he must reflect on it enough to see clearly the order of his thoughts, and to put them in proper sequence—in a continuous chain, each of whose links represents a unified idea. . . . If he writes as he thinks, if he is himself convinced of what he wishes to prove, this good faith with himself, which is the foundation of propriety toward others and of sincerity in style, will make him accomplish his whole purpose; provided always that his inner conviction is not expressed with too violent enthusiasm, and that he shows throughout more candor than confidence and more light than heat. . . . To write well—it is at once to think deeply, to feel vividly, and to express clearly.[1]

A good letter is the product of the mind *and* the heart. Clarity and sincerity stand side by side as the twin virtues of the good letter.

DEVELOPING GOOD HABITS OF EFFECTIVE MESSAGE WRITING

A study of the habits of men who write effective communications prove that letter writing skill can be developed. How? *First*, the writer visualizes the person who will receive the letter. What does this person want to know? What points has this correspondent raised in his own message? *Second*, the writer puts down the points which this actual person urgently wants discussed. He puts them down in what he believes to be the order of the reader's interest—first things come first. Some writers jot down on the back of the letter they are answering the facts and ideas which they wish to cover in the reply. Other writers keep a pad and pencil at hand for the purpose. Still other writers make notes in their mind. Whatever

[1] Lane Cooper, *The Art of the Writer* (Ithaca: Cornell University Press, 1952).

KINDS OF SALUTATION AND COMPLIMENTARY CLOSE

Salutations commonly used

Gentlemen:	*To a firm—preferable to Dear Sirs:*
My dear Mr. Adams:	*fairly formal*
Dear Mr. Adams:	*good style*
Dear Adams:	*fairly familiar*
Dear Sherman:	*familiar*

Complimentary closes commonly used

Very truly yours, Yours very truly, Truly yours,	*always in good form*
Very sincerely yours, Cordially yours, Faithfully yours,	*closely personal*
Respectfully yours,	*formal—to superiors and in letters of transmittal*

the method, a good letter writer makes an orderly approach to his task. *Third,* on the basis of his notes the writer organizes his points in the sequence which he proposes to use in their presentation. *Fourth,* he studies his notes to eliminate ideas and words which do not deal directly with the problem at hand. He is as much concerned with what he leaves out as he is with what he puts in. *Fifth,* he writes or dictates his letter from his notes. *Sixth,* he reads the final draft to be sure that it is correct and that its display on the page meets high standards of presentation.

ATTRACTIVE DISPLAY OF THE LETTER

The arrangement of the text of the letter on the page has much to do with the impression which the communication makes upon the reader. Because letters vary in length from a single paragraph to several pages, the writer must pay attention to the most effective design of his presentation. Before his typist begins her work, she should estimate the length of the letter and plan her pages accordingly. A single paragraph letter should be double-spaced and so arranged that the text will stand in the center of the page. On the second and following pages of a multi-sheet letter the name of the addressee should be typed in the upper left corner, the number of the page should be given in the center, and the date of the letter should be carried in the upper right-hand corner. It is not necessary to repeat the entire inside address. When the letter is addressed to a company, the company name should be carried on the second and subsequent pages. If it is addressed to an officer of the company, the officer's

name and the company name should be typed in. Figure 14.6 shows a well-planned letter with a high degree of readability.

PROPER FOLDING OF LETTERS

The correct folding of a letter and its insertion into the envelope have a good deal to do with the impression which the communication makes. Properly to put a full-page 8½″ x 11″ letter in an ordinary 6½″ x 3¾″ enve-

ACME FOOD ENGINEERING SERVICE
1313 Elgin Avenue
Central City, New York
AXminster 5-131

May 5, 1955

Mr. Earl Rice
Cafeterias, Inc.
Main and Center Streets
Pittsburgh, New York

VISUAL ICE CREAM SELLING

Longley's Cafeteria, Mr. Rice, doubled its ice cream sales by installing self-serving visual selling cabinets. Experience at the 50th Street and Avenues of the America restaurant proves that by exposing ice cream for sale on a self-serve basis sales skyrocket to the satisfaction of the retailer, manufacturer, and customer. This fundamental merchandising technique of course is the backbone of today's vast package volume in supermarkets.

Our problem was this: How can Longley's expose ice cream for sale in a way that will catch the eye of each diner as he makes his way along the cafeteria line?

It is obvious to all of us in the food business that most cafeterias "hide" their ice cream in difficult-to-reach and impossible-to-be-seen cabinets. Salads on the contrary, bedded down in crushed ice, stand out to whet the appetite and make the cash register jingle. Fruits, pies, and tempting desserts catch the eye and say "Put me on your tray." How can ice cream, visible only by name on the menu board, compete with the palate-pleasing aromas of other foods which can be seen and reached?

To solve this problem Longley's installed a refrigerated six-inch-deep tray type display cabinet at waist height in the service line immediately adjacent to the fruits. It is equipped with a 1/3 horsepower remote compressor. Except during service hours a transparent plastic lid encloses the entire contents. The tray is stocked with 32-ounce cubes of diced ice cream, laid two layers deep. All that the customer has to do as he moves along the line is to select a flavor, place the cube on his tray on the railing, and walk on. A point-of-purchase sign at the location says "Diced Cream for Dessert Today."

"The new and more profitable method of selling ice cream," Mr. Bickford says, has three other advantages:

1 It reduces customer ill-feeling created when the service line is slowed up by some person waiting for a special order.

2 It eliminates the hasty serving, lack of uniform portions, and dripping losses experienced during rush hours.

3 It insures an exact food cost of about 36 per cent per portion.

Why don't we go down and look at Longley's visual selling cabinet Thursday noon at 12:30 or at some other time if it is more convenient to your calendar?

John K. Byler

John K. Byler

Fig. 14.7. Simplified letter

lope, the writer folds the bottom edge to within a quarter of an inch of the top and creases the paper to show a line slightly below the middle of the page. He then folds the right edge a third of the way across to the left. Next he folds the left to the right and creases, the fold from the left being completed last. He inserts the letter in the envelope so that the last left fold is on the upper side of the envelope. When the envelope is broken, the letter then opens right-side-up to be read. To fit a large-size envelope the letter is folded in thirds, bottom edge first, then top edge down to within a quarter inch of the first folded page. The letter is placed in the envelope by inserting the bottom creased edge first.

So far the discussion of letters has been concerned with methods and mechanics. Good methods and good mechanics are fundamental for the production of quality letters. Letters, however, are living things.

LIVING CLASSIFICATION OF LETTERS

When classified as "living" things, letters fall into these six general categories:

1. **Newsy letters** are chatty little informal communications that gossip on about items of mutual interest and bring friendships up to date. These letters in business affairs bring more than a congenial satisfaction; they keep the channels of contact open with people who come into the lives of one another. Often just a postal card or note with a brief message penned on it, indicating where a person is and what he is doing, evokes a warm response. A report writer needs to keep his fences repaired.
2. **Events-of-life letters** are highly personal and thoughtful notes which are dispatched on the occasion of crises in life. These include congratulations on graduation, promotion, marriage, outstanding achievement, and recognition. What these messages say in substance is this: "I'm proud of you. You've done it and you've earned it." These same events-of-life-letters also include notes of sympathy on the occasion of accident, misfortune, illness, and death in the family circle. "I'm thinking of you now." That is the message of sympathy. The fact that one person has stopped in his own busy routine to think of another person means a great deal. By thoughtful events-of-life letters a writer gives continuing meaning to friendship.
3. **Letters of social intercourse** are notes of invitation, acceptance, and regret. They include "thank you" notes written with the intimate little words which express appreciation in a way which shows that one person really understands what the other has attempted to do.
4. **Organization letters** include communications necessary for the operation of group activities. These are letters of appointment, promotion,

termination, notices calling meetings, discussion of corporate affairs, and transmittal of minutes.

5. **Business letters** are communications required by the routine of commerce and industry. These include requests for information, answers to requests, procurement and supply letters, as well as credit, collection, sales, and promotion communications.
6. **Report letters** are fact messages dealing with specific subjects. These include letters of inquiry, letters of acknowledgment, informal progress reports, summaries of research, and letters of authorization, transmittal, and acceptance.

LETTERS DISCUSSED IN OTHER SECTIONS

The letter of transmittal is discussed in Chapter 18, dealing with the long-form report. Letters of application are covered in Chapter 26, "Personal Reports." This section is concerned only with the letter of inquiry and the report letter which answers it.

LETTER OF INQUIRY

The letter of inquiry is one of the report writer's chief means of obtaining information. The author wrote the following note to Professor Irving Lorge, of Columbia University:

Dear Professor Lorge:

In completing a chapter on readability for a new text on report writing to be published by Prentice-Hall, I am anxious to know how your formula differs from that of your former student, Rudolf Flesch.

Professor Lorge reported the difference in the letter shown as Figure 14.8.

The letter of inquiry which obtained the report reply presented in Figure 14.7 read:

Acme Food Engineering Service
1313 Elgin Avenue
Central City, New York

Gentlemen:

An item in the *Ice Cream Trade Journal* leads me to believe that you have developed a method of visual selling of ice cream in cafeterias.

I shall greatly appreciate your courtesy if you will give me a report on the subject. Naturally we are concerned with every new means for increasing the volume of sales and profit in our business.

REPORT LETTERS

Acme Food Engineering Service replies with the report letter shown in Figure 14.7. Note that this letter states in the first sentence that the

TEACHERS COLLEGE
COLUMBIA UNIVERSITY
NEW YORK

DIVISION OF PSYCHOLOGY
INSTITUTE OF EDUCATIONAL RESEARCH

October 22, 19

Dr. Paul F. Douglass, President
The American University
Washington 6, D. C.

Dear Dr. Douglass:

The Flesch Formula was developed by Dr. Flesch under my supervision in connection with his candidacy for the doctorate at Columbia University. Objectively measured, the Flesch Formula does not predict the criterion as well as the Lorge Formula. The difference between the Lorge and Flesch predictions, while statistically significant, may be of minor practical concern.

Dr. Flesch used the Lorge materials to establish his formula. The Flesch Formula measures vocabulary load by affixed morphemes, human interest by personal pronouns and certain nouns, and ideational complexity by sentence length. The Lorge Formula measures vocabulary load by the number of words outside a list of words common to Thorndike's most frequent thousand and the kindergarten word list, ideational complexity by sentence length, and predication by the number of prepositional phrases.

The Lorge Formula predicts readability at the level of 55% understanding, whereas the Flesch Formula predicts readability at the 75% level. Experience with the Lorge Formula suggests that the 55% criterion is more realistic than the one chosen by Dr. Flesch. The difference in the readability score predicted by the two formulae is a constant. Either formula has been very useful in estimating the difficulty of text materials. The factor of readability alone does not account for all difficulties that people have with texts. Other factors, i.e. appeal, legibility, color, illustration, should be considered in evaluating any textual presentation.

The Institute of Educational Research does not engage in evaluation of texts on a commercial basis. For research purposes, a member of the Institute staff has made the analyses on a cost basis. A rough estimate is that the charge per hundred word sample would be seventy-five cents to a dollar.

Very truly yours,

Irving Lorge

IDL:dm

Fig. 14.8. Report letter answering letter of inquiry

visual selling of ice cream doubled sales. This fact of course was the important finding. In the next paragraph the engineer states the problem which he set out to resolve. This he elaborates in the third paragraph. In the fourth paragraph he describes how he solved the problem. In the fifth paragraph he summarizes additional benefits derived from the installation. Finally, he makes a specific proposal to show Mr. Rice the Longley's visual ice cream selling system.

The American Stores letter in Figure 14.6 is the report reply to an inquiry from a shipper in Iowa. Note its friendly close.

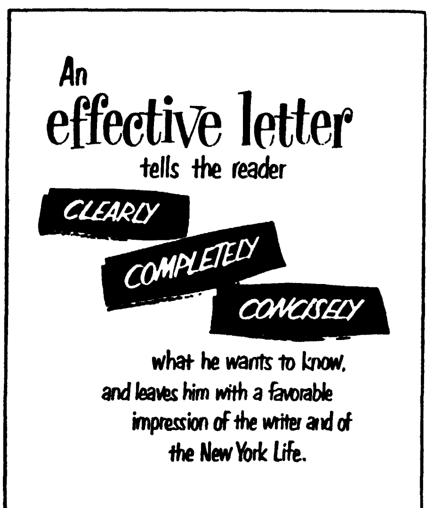
BUILDING A REPUTATION FOR WRITING GOOD LETTERS

A reputation for ability to write good letters is a valuable asset. Every writer who applies himself to the task of drafting personal communications that are direct, orderly, sincere, and positive will find satisfaction in his performance. To write well, said Buffon, is to have "at once intelligence, sensibility, and taste."

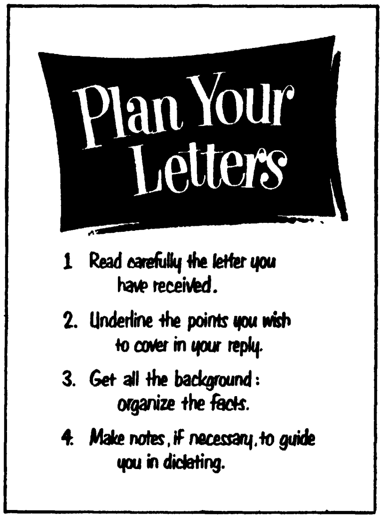
CASE HISTORY: AN INDUSTRY PROGRAM FOR BETTER LETTERS

How can industry help its personnel to write letters with the qualities of "intelligence, sensibility, and taste" which Buffon suggests? Letter writing puts skill in language usage to its severest test. Principles discussed as academic concepts in Part Two of this book become urgently needed working tools for correspondence. The "effective letter" program of the New York Life Insurance Company provides a case history of the efforts of an industry to shape language to the needs of human understanding and business efficiency.

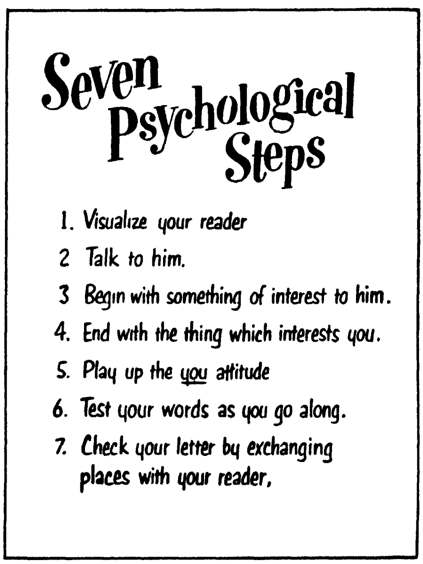
An effective letter, says Nylic, possesses certain qualities which express the inner competence and taste of the writer. It is simple in language clear in idea, concise in statement, conversational and courteous in tone and economical in mechanical requirements. With visual emphasis the company says that



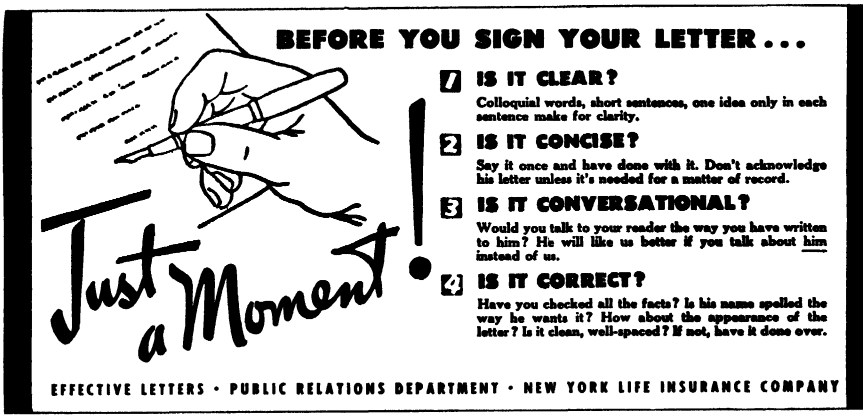
How does a writer build this kind of letter? The company finds the answer in the word "planning." It advises its personnel:



Upon the basis of his plan the writer drafts his letter by taking seven psychological steps:



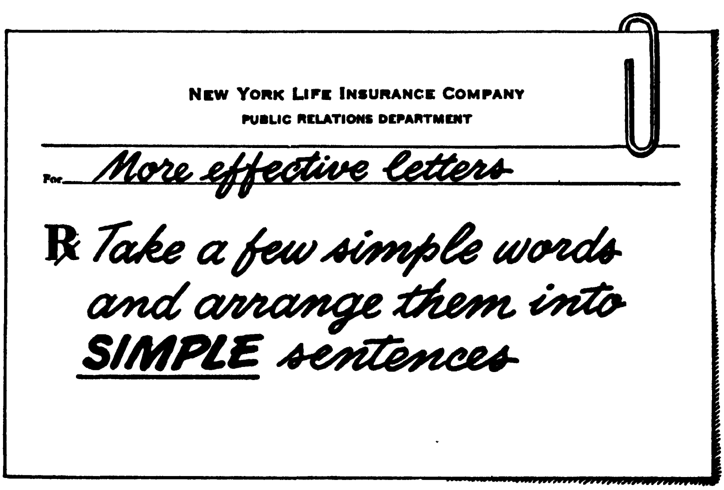
Right up to the last moment when the writer dries the ink on his signature, Nylic urges him to maintain effective letter standards. The desk blotter warns:



After all the general principles have been covered, the company knows that the quality of a letter depends upon the quality of the sentence. Every rule of language must in the end find its expression in the design of the sentence. Thinking about a sentence for Nylic begins with the definition that it must express just one idea. The company emphasizes this requirement visually by the formula:

1=1 One idea only in each sentence 1=1

Because the company believes that the simple sentence is the most useful tool in business communication, it proposes this recipe for good writing to make easy reading:



Clarity in a letter, however, is only one of the qualities which Nylic wants. The text must also have force. "Forceful writing," it says, "has the power to impel others to action." And how does the writer introduce this additional factor of forcefulness? New York Life answers: "by the use of active transitive verbs." Force comes through the use of "live words." Nylic advises its staff: "Eye your verbs! Are they vigorous and active, or are they passively supine? Active verbs bring force to letters. Passives bleed letters of their strength."

For emphasis, Nylic personifies certain abstract principles. It describes the participle, "as a verb masquerading as an adjective," as a "thief" which robs letters of their forcefulness. This participle wears many dresses: *thanking, assuring, hoping, trusting,* and *believing.* With contempt, Nylic brands that participle, so popular in the business letter, as the weakest verbal construction in the American language.

Just as the thief robs the letter of force, so the "beggar" removes its backbone. For emphasis Nylic takes recourse to verse:

THE BEGGARS

They beg to inquire and they beg to state,
They beg to advise and they beg to relate;
They beg to observe and they beg to mention,
They beg to call your kind attention;
They beg to remark and they beg to remind,
They beg to inform you will herewith find;
They beg to announce and they beg to intrude
They beg to acknowledge, they beg to reply,
They beg to apologize, they beg to deny;
They reluctantly beg for a moment of time,
They beg to submit you an offer sublime;
'Till I wish I could put that annoying array
Of beggars on horseback and send them away.

On the team of conspirators plotting against effective letter writing, Nylic joins to the thief and the beggar a character named Mr. Windmill. In a stuffy sort of way, Windmill is a man of dignity. He carries a top-heavy respect for tradition into his everyday speech and into his every-day letters. Although he was interred a half century ago, his pen still studs Nylic letters with "quaint expressions" considered proper in those far off days when steam trains ran on the Third Avenue el!

First, Mr. Windmill uses words to weave "daisy chains." He links idea with idea by such words as: *and, but, for, nor,* and *or.* He complicates letters with transitional adverbs used as conjunctions such as: *therefore, moreover, however, accordingly.* He crowds his language. He tries to say

too much in each sentence. Yes, Mr. Windmill weaves daisy chains with his ideas, looping them together with commas and conjunctions.

Second, Mr. Windmill is addicted to doublets. He likes to team up two words to say the same thing. Once upon a time, in the Victorian age, doublets, says Nylic, were popular because their use lent a certain stately quality to prose. But what was stately in Victoria's time is merely "stuff and clutter in our own." Why use two paired words such as "grateful and appreciative"? Or, for instance:

INSTEAD OF:	*WHY NOT:*
absolutely complete	complete
ask the question	ask
basic fundamentals	fundamentals
entirely complete	complete
exactly identical	identical
sending by mail	mailing
whether or not	whether
will you be good enough to	please

Why pile one word on top of another under the impression that such doubling adds emphasis to the meaning? Such an idea might be at home in New Guinea where the doublet is an integral part of speech, but not in the good old United States of America.

Third, Mr. Windmill brings "moss from an old manse" to his letters. Here are a few of the phrases culled from the gentleman's letters:

acknowledge with pleasure	in connection therewith
anticipating your reply	in due course
attached please find	please rest assured
beg to acknowledge	regret to inform
desire to state	thanking you in anticipation
for your information	under separate cover
herewith please find	with reference to
I trust	yours with respect to same

THE EMOTIONAL BOND

Finally, Nylic distinguishes between the *mechanics* and the *humanics* of letter writing. Because the tone of a letter builds an emotional bond between the writer and reader, says Nylic, every successful writer actually operates as a practicing psychologist. *Mechanics* is the machinery of the letter and relates to the arrangement of ideas. *Humanics* refers to the feeling between the writer and reader. The language of a letter, Nylic says, has two components: "the things we say and the machinery we use to say them. One of the functions of a letter writer for the New York Life is to create good will for the company."

THE WITNESS OF THE SAGES

After exhausting other channels of persuasion, Nylic turns to quotations from the sages of the ages to emphasize the importance of straight speech in letters. Two of these will give the gist of the testimony:

> Except ye utter by the tongue words easy to be understood, how shall it be known what is spoken? For ye shall speak into the air.—I Corinthians XIV 9

> Every paragraph should be so clear . . . that the dullest fellow in the world will not be able to misstate it, nor be obliged to read it twice in order to understand it. —Lord Chesterfield

Exhortation to better letter-writing, however, is not enough. R. S. Mason of the Nylic public relations department says:

> To be effective, any letter-writing program must be a continuing one. By means of refresher courses, a series of films, and conferences between correspondents and instructors, New York Life helps its personnel to develop and maintain habits of good writing.
>
> At any given moment, the quality of letter-writing in any department may be ascertained by means of an analysis of carbon copies of correspondence. High standards, plus information and help to guide people to achieve them, provide the incentive for personal growth in letter-writing competence.

READINGS

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Frailey, L. E., *Handbook of Business Letters.* Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1948. *

Hower, Nels and Aline Hower, *Successful Letter Writing.* New York: Doubleday, Doran & Company, 1942.

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Wilkinson, C. W., J. H. Manning, and C. R. Anderson, *Writing for Business.* Chicago: Richard D. Irwin, 1951.

TRY YOUR HAND AT THESE •

- **to become acquainted with the qualities and standards of good letter writing**
- **to use letters in reporting**
- **to practice writing effective letters**

1. Write a 4 ~~six~~paragraph letter in which you describe to an associate ~~six~~ qualities of a good letter.

2. From the different letter formats discussed in this chapter, select the one which appeals to you most and which you personally propose to use. Then write a letter to your instructor telling him why you have selected this format. In preparing the letter and the envelope and in folding the sheet to insert in the envelope follow procedures discussed in this chapter.
3. Write two letters of inquiry related to your long-form career study. In the first, request information from the United States Office of Education, Washington, D. C. about the career on which you are writing. In the second, direct questions about the career to a person who is a success in it.
4. Write a letter to your staff describing the standards which you expect in letters issued from your office.
5. You have been working on a report with Elton K. Atwood. In reading through the evening paper you note that his son has been elected to Phi Beta Kappa. Write him a short personal letter.
6. Take a letter which has been written to you. Analyze this letter for its strengths and weaknesses. Then write a letter to your instructor pointing out why the letter is good or bad. If the letter needs improvement, redraft it to meet good standards.
7. The New York Academy of Sciences held a discussion concerning the efficiency of a drug known as reserpine, used in the treatment of serious psychiatric conditions. You are interested in the substance of a report made by Dr. Arnold P. Friedman on his experience in the use of the drug for treatment of patients suffering from hypertensive headache. The information about the report is in the hands of L. H. Ash, manager of the professional service department, E. R. Squibb & Sons, 585 Fifth Avenue, New York. Write a request for information about Dr. Friedman's paper. Use the modified block style.
8. Answer the letter of inquiry. The facts are these. Arnold P. Friedman, M.D., treated two groups of patients daily with 0.75 mg. reserpine, administering the drug orally in three equal doses. The test group included 33 patients with hypertensive headache and 80 patients with tension headaches. Treatment ranged from 2 to 5 months with maximal action in 7 to 10 days. The patients with hypertensive headache improved considerably. This improvement was associated with a considerable drop in systolic and slight drop in diastolic pressure. Improvement was moderate in patients with tension headaches. The use of reserpine proved ineffective in the treatment of 37 patients suffering with migraine. In all but a few of the total cases, side effects such as stuffy nose, excessive drop in blood pressure, and slight drowsiness were ineffective. Dr. Friedman recommended further study.

   In writing the report answer to the letter of inquiry, use pure block style.
9. Describe the fault in this letter of Mr. Windmill:

Dear Sir:

We are grateful and appreciative for the opportunity to submit the information enclosed herewith. We stand ready, willing and able to be of assistance and service in any way, shape or form, and look forward with anticipation to your mutual cooperation.

Yours truly,

10. Here is another letter of Mr. Windmill. Identify the fault. Then rewrite it so that it becomes an effective letter.

Dear Sir:

With reference to your letter of August 18, addressed to our Milwaukee agent, in connection with this policy, copy of which was forwarded this department, we wish to inform you that, in view of the fact that the agent is unable to locate the June 1 renewal of this policy, it will be necessary that the enclosed lost affidavit be executed by the agent and that you have it properly executed and returned to this office so that we may have something on file accounting for this renewal.

Yours very truly,

11. Identify the fault in this letter:

Dear Mr. Sanderson:

We have received your letter of August 27, and we wish to state how grateful we are for your expression of confidence in us.

Our wish has always been that we should be of service to our policyholders whenever we are called upon.

Let us say again how much we appreciated your writing to us.

Sincerely yours,

Rewrite the letter and emphasize the "you attitude."

15

THE MEMORANDUM

THE MEMORANDUM IS A CONCISE, INFORMAL, TYPEWRITTEN DISCUSSION of a single subject directed to a specific individual or a selected group of individuals. It has a distinctive structure. In style it prunes away all formalities characteristic of a letter. It drops the salutation, the complimentary close, titles of rank or courtesy, and other "handles." The pattern of the heading varies somewhat from firm to firm, but every memorandum states at its beginning the person *to whom* it is directed, the person *from whom* it comes, the *subject* which it discusses, and the *date* under which it is transmitted.

In modern office operations the memorandum serves as a flexible and convenient device for putting ideas down on paper so that they can be given the attention they deserve. "Write me a memorandum!" suggests the busy executive. "Have you had time to read my memo?" inquires the person who is communicating an idea. "I'll leave a memorandum on your

desk," an office associate advises, so that a point, orally discussed, can be formulated for more detailed study.

FORM OF MEMORANDUM

As a guide to memorandum writing, Figure 15.1 suggests specifications for an easy-to-read communication.

MEMORANDUM

TO:	U. R. Reader, Industry Specialist	DATE: September 15, 195x
FROM:	I. M. Righter, Office Manager	
SUBJECT:	MEMORANDUM WRITING	

This exhibit gives an example of how a memorandum may be written for easy reading.

Margins. An attractively written memorandum has carefully planned margins. The word "MEMORANDUM" comes ¾″ or 1″ from the top margin and ¾″ from the left-hand margin. The body begins at the left margin so that the first words in paragraphs fall in a vertical line directly under the first letter of the word "SUBJECT." The right-hand margin of the page is slightly narrower than the left. The bottom margin should not be less than an inch.

Heading. The heading tells to whom the memorandum is directed, from whom it comes, on what subject it is written, and on what date it is transmitted. The subject is written in capital letters.

Paragraphs. The side headings in paragraphs are underscored. All paragraphs are typewritten single-spaced in block style, flush against the vertical line running down from the first letter in the word "SUBJECT." Lines within paragraphs are single-spaced, but double spaces are made between paragraphs. Sentences begin two spaces after a period.

Tables. Tables of figures are centered. The typist should be careful not to leave too much space between the narrative and figures introduced. Totals of figures should be underscored but *not* column headings, as for example:

	195x	195x
Real estate taxes	$11,111.11	$11,111.11
State franchise tax	11,111.11	11,111.11
Federal capital stock tax	11,111.11	11,111.11
	$11,111.11	$11,111.11

Numbering of pages. Each page of the memorandum should begin with an Arabic numeral preceded and followed by a hyphen and centered at the top of the page, as for example:

Fig. 15.1. Memorandum style sheet

MEMORANDUM WRITING

The subject should be repeated on each page. The text should begin on the fourth line below the top margin.

Charts. Graphs as well as tables can be included in memorandums. Their use increases readability. The chart can easily be built on the typewriter. By ingenuity a writer can devise a number of representative visual symbols. He can use XXXX for a straight bar chart. He can represent money by $$$$$$$. He can indicate people by a lower case *o* above backspaced parentheses so that the symbol looks like this: $\overset{o}{()}\,\overset{o}{()}\,\overset{o}{()}\,\overset{o}{()}\,\overset{o}{()}$. Worked into the text of a memorandum, the chart becomes an organic part of the communication.

COMPARATIVE PAYROLL: COST PER DOLLAR
OPERATING INCOME
(Eleven Months)

HOTELS STATLER

		Per cent
New York	$$	40.1
Buffalo	$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$	34.6
Washington	$$$$$$$$$$$$$$$$$$$$$$$$$$$$$	29.7

Transmittal. The names of persons to receive copies of the memorandum should be alphabetized. The address of each person given should be listed. The name of the person to receive a copy should be underscored with colored pencil. If one person only is to receive a copy of the attachments, this fact should be indicated by the word "attachment" written in parentheses after such person's name and address. If more than one copy is being sent to one person, this fact should likewise be noted in parentheses. A description of each attachment should be made in the memorandum. A line should be left at the end of the memorandum for signature, as shown below.

All memorandums should be dated for the office records and should show on the file copies only the initials of the dictator and typist. The dictator or writer should always initial the file copy.

Different memorandum styles. These specifications describe only one style of memorandum. Sometimes paragraphs are numbered to simplify reference. In other cases modified block style is used. Side headings sometimes are given separate space. The important principle is to have a particular clear-cut style and to stick to it.

Enclosure/Regulation 244.b

____

I. M. Righter

Copies to
Jane Evans, Room 605
John Kane, Jr., Room 388 (3)
Edward Lippincott, Annex, (2)

Fig. 15.1. ***(cont.)***

TO: All Department Heads
FROM: Robert R. Kern
SUBJECT: WOMENS BENEFIT ASSOCIATION S-381

The Womens Benefit Association will be meeting with us Sunday, June 5th through Tuesday, June 7, 195x.

Special attention should be given to: Mrs. Rose M. Jelinek
State Field Director
407-08 Frederick Building
Cleveland 15, Ohio

Present all bills to *Mrs. Jelinek*

SUNDAY, JUNE 5, 195x

2-7 PM	Registration—Main Lobby Provide: 2 sample tables, 6 chairs, wastebaskets and additional lighting. Also provide blotters. Chamber of Commerce is to provide one typist and one jumbo typewriter. (Registration will be moved on Monday.)

MONDAY, JUNE 6, 195x

All Day	Sample Room—headquarters—provide 2 sample tables & 6 chairs
7:30 AM	Breakfast—Kitty Hawk Room Approximately 50 persons will order from the menu Please try to reserve a special section in the room so that the ladies can all be seated together
8:30 AM-1:30 PM	Registration—move from lobby to fourth floor foyer All other arrangements will be the same as the previous day
8:30 AM	Entire group will be out of the building on a tour
1:30-4:30 PM	General Session—Junior Ballroom Speakers table for 12 persons on south wall Place speakers table on raised platform and center podium and microphone on this table Provide glasses, ice water, matches and ash trays Near speakers table provide 2 smaller tables, one for Recording Secretary and one for Treasurer Set room theatre-style for 200 persons, leaving center aisle wide enough for a small table which will be used as an altar. Service charge $20.00
6 PM	Banquet—Grand Ballroom Speakers table for 18 persons on east wall Provide a podium with light in center of speakers table Place piano in southeast corner of Grand Ballroom Set room banquet-style for 250 persons Tables are to be numbered according to the committee's plans. Provide 10 card holders for the reservation signs.

Fig. 15.2. Memorandum style information report used by a Hilton hotel

THE TECHNICAL MEMORANDUM

Engineers put the principles of the memorandum to work in an informal type of report designed for the easy communication of working information. Report specialists in General Motors Corporation research laboratories say that the simplicity of the format appeals to engineers. It en-

COPY 1

TECHNICAL MEMORANDUM
RESEARCH LABORATORIES DIVISION
GENERAL MOTORS CORPORATION
Detroit, Michigan

Dept Physics-Instrumentation Date Sept. 13, 1951
Subject Remote Fuel Control

Project No PI-4D No Sheets 5 Report No 32-132

Foreword

This report describes the construction and operation of a Remote Fuel Control for use with the single cylinder Chevrolet engine operated by the Organic Chemistry Department. The control enables the engine operator to regulate remotely the air-fuel ratio of the engine with greater precision than would be possible through the use of the conventional Sperry Hydraulic System. It was built at the request of the Organic Chemistry Department for use in their dynamometer control console at the New Technical Center.

Discussion

In the engine for which the Remote Fuel Control was designed, the air-fuel ratio is regulated by means of a needle valve interposed between the float chamber of the carburetor and the carburetor jet. Figure 1 is a photograph of the control apparatus. It consists of three units; (A) is the valve and its associated drive mechanism, (B) is the remote control box, and (C) is a standard Brown amplifier. The control box may be mounted in any desired location on the dynamometer panel and the amplifier, which requires no attention, may be mounted in a concealed position.

Figure 2 shows the needle valve and its drive and positioning mechanism, the valve itself being shown at (A). It is opened or closed by the action of the center gear (B), which screws down on the needle of the valve to close it, and opens it when turned in the opposite direction. The gear travels about 1/32 inch, or 2-1/2 turns, in moving the needle between the open and closed positions.

The torque required to drive the gear is provided by the Brown motor (C), which also turns the positioning helipot (D). This helipot is connected to the control helipot in the remote control box so that the combination forms a Wheatstone Bridge. A change in the position of the control helipot unbalances the bridge and the unbalance signal is applied to the input terminals of the Brown amplifier. The output of the amplifier is used to drive the motor, thus positioning the other helipot. The motor stops when a null is obtained on the bridge; that is, when the positions of the two helipots correspond. The gain of the

Author J. Brian Connell Approved By H Kassweiler
Department Head

Fig. 15.3. The technical memorandum

courages them to write—and to write more often. "The only fault we can find with the work of the engineer," they say, "is that he never does enough writing. Writing is usually difficult for him. The task takes time—valuable time which he frequently feels could better be spent in the laboratory. In fact, it is much easier to perform an experiment than it is to write a report about the work done."

STRUCTURE

In structure, the technical memorandum, exhibited in Figure 15.3, is composed of four parts: (1) the *foreword,* (2) the *discussion,* (3) the *conclusions,* and (4) the *attachments,* such as diagrams, charts, and tables. It is prepared on standard forms and typewritten in block style. The text is single-spaced within paragraphs, but double-spaced between paragraphs and between section headings and the beginning of the text of the first paragraph of the next section. It is triple-spaced between the end of the text in a section and the next sectional heading. The foreword begins an inch down from the heading. The bottom margin, including space for signatures, runs to an inch and a half, as does the left-hand margin, arranged to provide binding space. The right-hand margin is an inch wide. With this ample provision of white space the technical memorandum is easy-to-read.

The foreword, usually held to a single paragraph, introduces the presentation with a sentence which summarizes the content of the whole memorandum. The second sentence describes the purpose of the report and the use to which the findings may be put. The third sentence states the authorization for the operation. The discussion thus introduced follows in a series of paragraphs and pages which explain the investigation. The conclusions present the findings, offer a critique, and suggest whatever recommendations are in order. The attachments complete the document.

The technical memorandum serves as one of the most informal, convenient, and satisfactory methods of informal reporting.

TRY YOUR HAND AT THESE •

- **to learn the memorandum formats**
- **to become skilled in their use**

1. Write a memorandum on memorandums. In it give instructions on how you wish memorandums to be written in your office.
2. At two o'clock you have an appointment with a prominent man in your career field. Prepare a briefing memorandum for him, so that he will have in mind the purpose of your visit and what you hope to accomplish as a result of it.

3. Draft a memorandum to your office staff instructing them how to fold a letter and insert it in the envelope.

4. Based on your research in making the market estimate in Figure 2.6, write a technical memorandum explaining your performance and the results you have achieved.

RESEARCH LABORATORIES DIV. GENERAL MOTORS CORP. Report No 32-132 Page No. 2

amplifier may be adjusted to eliminate any tendency of the system to hunt.

The circuit diagram of the Remote Fuel Control is shown in Figure 3 and its Parts List in Figure 4. Detailed information about the Brown amplifier may be obtained from TI-243.

Conclusions

The Remote Fuel Control was installed and tested on the single cylinder Chevrolet engine in the Organic Chemistry Department. It was found that a change of one small unit on the helipot dial corresponded to a change of approximately 0.1% in the air-fuel ratio over the major portion of the operating range of the engine. Since the air-fuel ratio depends both on the position of the valve and on the conditions under which the engine is operated, it is not possible to calibrate the helipot dial in terms of air-fuel ratio; thus the control can only be used in conjunction with an air-fuel ratio indicator.

The response is rapid enough for satisfactory control of the air-fuel ratio. Once positioned, the control unit may be turned off if the operator desires to run the engine under a constant set of conditions.

Fig. 15.3. (*cont.*)

5. In your career study you have been studying the educational requirements desirable or necessary for entering the field. Write a technical memorandum on this part of your inquiry.

6. Write a technical memorandum describing an experiment which you have been conducting.

REFERENCE

DEPT. P1

PARTS LIST

GENERAL MOTORS CORPORATION
RESEARCH LABORATORIES DIVISION
DETROIT, MICHIGAN

ITEM	PART NO.	DRWG SIZE	PART NAME	QUANTITY PER MODEL				REMARKS
1	6250762	C	Remote Fuel Control - wiring diagram	1				
2	6250764	B	Amplifier mounting panel	1				
3	6250701	B	Valve Mount	1				
4	6250700	B	Motor Mount	1				
5	6250706	A	Helipot Shaft Bushing	1				
6	6250707	A	Spacers	4				
7	6250698	A	Valve Holder	1				
8	6250699	A	Valve Gear Center	1				
9	6250708	C	Assembly	1				
10			AN-3057-6	2				
11			AN-3106-14S-2S	1				
12			AN-3106-14S-2P	1				
13			AN-3102-14S-2P	1				
14			AN-3102-14S-2S	1				
15			AN-3106-16S-1S	2				
16			AN-3057-8	3				
17			AN-3100-16S-1P	1				
18			AN-3102-16S-1P	1				
19	76020		Brown Amplifier	1				
20	CC4		Cable Clamp	1				
21	86PM6		Amphenol Connector	1				
22	3520		Line Cord	1				
23			Brown 2-phase 35-40 rpm. Motor	1				
24			500 ohm Beckman Helipot	1				
25			100 ohm Beckman Helipot	1				
26	PRF-331		Tobe 1 mf. 330 v. A.C. Capacitors	2				
27	CU-729		Bud Box 4 x 5 x 6"	1				
28			Johnson Pilot light assembly, 75 w., 125 v.	1				
29			SPST Toggle Switch, 110 v.	1				
30			On-off Toggle Switch Plate	1				
31	R-10		Duodial	1				
32	6S6		G.E. 110 v. A.C. Lamp	1				
33			Belden 8424	1				
34			Belden 8427	1				
			Hoke 1/8" Needle Valve	1				

COMPILED BY Brian Connell REVISIONS

DATE ISSUED

SUPERSEDES DATE

MODEL Remote Fuel Control

SHEET 1 OF 1 GROUP

SERIAL NO. 62507620 DATE 8-14-51

Fig. 15.3. (*cont.*)

16

INFORMATION REPORTS

AN INFORMATION REPORT COMMUNICATES FACTS OF IMMEDIATE IMPORtance to the reader. It presents these facts with the greatest visual simplicity, in the smallest required space, with the greatest possible accuracy. Three examples will illustrate the nature of this kind of report.

SENTENCE AND PARAGRAPH STATEMENT

The Northern Trust Company, Chicago, spent two years of research in developing what it calls a "comprehensible" information report to use in issuing statements of accounts and investments to trust department customers. The objective of the bank was to develop concise and easily understood reports which would not perplex persons unfamiliar with accounting terminology. The report form, as finally developed, was issued on eye-pleasing gray paper, in a size convenient for filing, with sentences and paragraphs which read much like a narrative letter. The specimen report

cited in Figure 16.1 shows how easy-to-read and sharply focused the report becomes.

APPRAISAL SHEET

A second type of report is the appraisal sheet. Perhaps the best example of this type of information report, as shown in Figure 16.2, is the effective

TRUST DEPARTMENT

THE NORTHERN TRUST COMPANY
50 South La Salle Street • Chicago 90 Illinois

CASH STATEMENT

JUNE 30, 195- TO SEPTEMBER 24, 195-

TRUST UNDER AGREEMENT
JOHN DOE

INCOME CASH SUMMARY

YOUR LAST STATEMENT SHOWED NO INCOME BALANCE			$	0.00
SINCE THEN THE FOLLOWING INCOME HAS BEEN RECEIVED				
DIVIDENDS	$	550.50		
INTEREST		535.63		
REAL ESTATE RECEIPTS		375.00		
	TOTAL RECEIPTS		$	1,461.13
AND THE FOLLOWING DISBURSEMENTS WERE MADE				
RESERVES AND TRANSFERS	$	85.00		
INCOME PAYMENTS		1,200.00		
EXPENSES AND FEES		100.00		
	TOTAL DISBURSEMENTS		$	1,385.00
LEAVING INCOME CASH ON HAND OF			$	76.13

PRINCIPAL CASH SUMMARY

YOUR STATEMENT ALSO SHOWED A PRINCIPAL BALANCE OF	$	1,958.00
RECEIPTS FROM SALES, MATURITIES, ETC.	$	0.00
PAYMENTS FOR PURCHASES, TRANSFERS, ETC.	$	1,003.75
LEAVING PRINCIPAL CASH ON HAND OF	$	954.25

THE DETAILED TRANSACTIONS ARE
LISTED ON THE FOLLOWING PAGES

Fig. 16.1. Sentence–paragraph information report

pattern used in giving the facts about a stock. Every device for concise statement, ease in reading, completeness, and accuracy is used. Charts, thumbnail high lights, tables, and text are used with skill. Bold-face capital letters are used as key words to guide the eye. The appraisal sheet jams

MERRILL LYNCH STOCK APPRAISAL ON — LISTED NYSE - SYMBOL MTM

MINNESOTA MINING 3M COMPANY and MANUFACTURING

Revised· March 22, 1955

COMMON STOCK

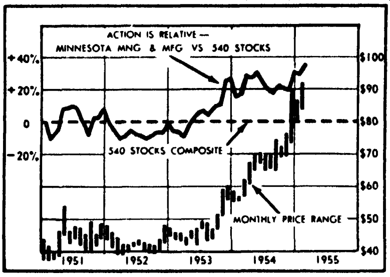
1955 PRICE RANGE 99 – 80

RECENT PRICE. 92

DIVIDEND· $1.60 (current indicated annual rate)

YIELD· 1.7%

TYPE OF STOCK Investment grade stock of a sound company with impressive growth record and aggressive research policies. Earnings usually appraised liberally due to outstanding growth potentialities.



CURRENT DEVELOPMENTS: Intensive merchandising efforts applied to the fruits of extensive research and product development have contributed importantly to the growth and success of this company to date. Several new tape developments and the introduction of a glass filament reinforced plastic sheeting suitable for a wide variety of applications featured 1954 additions to the company's lines. The company also joined the Rocky Mountain Nuclear Power Study Group to investigate practical applications of atomic energy. In spite of a decline in volume for certain lines, acquisitions, new products, and the lapse of EPT enabled the company to report record sales, and earnings during 1954. Improved business prospects for 1955 may well permit the company to enjoy another record year.

GROWTH POTENTIAL: A long succession of steadily higher sales is strong evidence of the company's growth trend. Of more importance has been the company's ability to maintain relatively good pre-tax and net profit margins. Success has been attained through continual introduction of new products wherein competition is either lacking or not aggressive, or through strong sales promotion of both old and new products. Management's past record and current investments in research and facilities lend a great deal of confidence to future growth potential.

RESEARCH AND DEVELOPMENT: An important part of the company's success is attributable to its research program. Last year $8.0 million was expended for this type of work vs $6.7 million in 1953, equivalent to over 3% of annual sales volume. The company has found that $1.00 spent on research has ultimately produced about $25.00 in sales. Several years have been spent in developing fluorochemicals and capacity for their production has been expanded. Intensified marketing for this product group is planned for 1955. Efforts are also being directed toward commercial production of glass fiber reinforced plastic pipe. About 1200 persons are engaged in research projects to develop new and better products.

SALES TREND: Sales for the indicated quarters were as follows·

	March	June	September	December
	Million Dollars			
1954	$54.1	$57.8	$55.9	$63.1
1953	51.1	55.2	56.8	56.9
1952	44.0	44.1	45.7	51.5
1951	44.4	41.5	41.0	43.3

EARNINGS RECORD: While there have been fluctuations in profit margins, they have been generally good. Earnings have tended to follow the growing sales picture but in recent years, have been retarded by EPT.

DIVIDEND RECORD: Dividends have been continuous since 1928. Steady growth of facilities and working capital needs necessitated a conservative dividend policy but the payout has been liberalized in the last three years. Reduced tax accruals were probably important considerations when the quarterly dividend rate was increased

MERRILL LYNCH, PIERCE, FENNER & BEANE

Underwriters and Distributors of Investment Securities • Brokers in Securities and Commodities

70 PINE STREET, NEW YORK 5, N. Y.

Fig. 16.2. Appraisal sheet type of information report

information into a standardized format but presents the material in a design so appealing to the eye that it invites attention.

SYNOPSIS

Contemporary economy actively revolves within the orbit of credit. At some point in a business transaction an officer of a company must determine the reliability, resources, and managerial resourcefulness of the cus-

twice during 1954 and again in February 1955 to a quarterly rate of $.40 per share.

BUSINESS· The company is best known as the producer of "Scotch Tape" brand pressure sensitive tapes of more than 200 varieties. This line, including decorative ribbon, accounted for about 37% of 1954 sales volume. Coated abrasives used extensively in the metal and woodworking industries represented about 15%. Electrical products such as insulation, magnetic tapes, and splicing materials made up 16% of volume. Other important lines are graphic products which including "Scotchlite" reflective sheeting for use in signs and advertising, presensitized aluminum photo offset plates, and duplicating machines. Roofing granules has enjoyed growing demand emphasized by the construction boom and is a major company item. A wide variety of adhesives and coatings are also produced for many industries.

FINANCIAL POSITION: Good earnings and a conservative dividend policy have enabled the company to grow and operate without substantial senior capital ahead of the common. Capital expenditures during 1954 were $9.6 million, only modestly more than depreciation charges of $8.9 million. Retained earnings permitted a further increase in working capital to $62.3 million as of the 1954 year end vs $52.1 million.

CAPITALIZATION – DECEMBER 31, 1954

2 3/4 S.F. Debentures due 1967	$8,400,000
Notes Payable – Canadian Subsidiary	1,850,000
$4 Cum. Pfd. Stk. (No Par)*	94,000 Shs.
Common Stock (No Par)	8,218,985 Shs.

* Callable at 102.

INTERIM EARNINGS AND DIVIDENDS
A Common Share

	1954 Earns.	1954 Divs.*	1953 Earns.	1953 Divs.*
3 Mos. Mar. 31	$0.64	$0.30	$0.53	$0.25
3 Mos. June 30	0.75	0.30	0.57	0.25
3 Mos. Sept. 30	0.71	0.35	0.55	0.25
3 Mos. Dec. 31	0.85	0.35	0.49	0.25

* Paid or declared during interim period.

SELECTED INCOME ACCOUNT DATA

Years Ended Dec. 31	Net Sales*	Net Oper. Income*	Net Income*	Pre-Tax Margin of Profit	Net Inc. % of Sales	Fix. Chgs. & Pfd. Divs. Times Earned	A Common Share† Earns.	A Common Share† Divs. Paid	Price Range High	Price Range Low
1954‡	$230,890	$47,327	$24,624	21.3%	10.7%	35.39	$2.95	$1.30	90	55 1/4
1953	219,916	47,524	17,978	22.4	8.2	28.19	2.14	1.00	60 1/4	42
1952	185,241	40,269	16,090	22.3	8.7	22.87	1.96	1.00	48 1/4	39
1951	170,068	37,691	15,738	23.3	9.3	22.23	1.92	1.00	54	37 1/4
1950	152,806	40,339	20,319	27.2	13.3	30.34	2.51	0.80	37 3/4	23 1/2
1949	114,925	23,436	14,352c	21.2	12.5	19.94c	1.77c	0.65	25 1/4	16 5/8
1948	108,246	21,110	13,235	20.3	12.2	19.93	1.63	0.52 1/2	19 1/2	13 5/8
1947	93,437	15,445	10,715b	18.0	11.5b	–	1.32b	0.38 3/4	17 3/4	12 7/8
1946	75,170	15,298	9,921	21.6	13.2	–	1.27	0.36 1/4	15	10 1/8

*Thousand dollars. † Adjusted for 2-for-1 stock split in Nov. 1945 and 4-for-1 stock split in Jan. 1951. ‡ Includes Canadian subsidiary excluded in prior years. b. Before reserve credit equal to $0.12 per share. c. Excludes tax refund equal to $0.13 per share.

SELECTED BALANCE SHEET DATA (Million Dollars)

As of Dec. 31	Cash Items	Recs.	Invent.	Current Assets	Current Liabs.	Net Working Capital	Plant Gross	Plant Net	Long Term Debt	Pfd. Stk.	Com. Stock, Surp. & Reserves
1954*	$39.6	$24.3	$38.4	$102.4	$40.1	$62.3	$117.7	$75 4	$10.3	$ 9.4	$125.7
1953	$35.6	21.1	39.9	96.5	44.4	52.1	105.0	69.9	8.8	9.6	112.1
1952	34.3	20.7	32.9	87.9	38.5	49.4	88.3	58.5	9.2	9.8	95.8
1951	24.5	18.0	42.1	84.6	36.2	48.4	79.3	53.2	9.4	10.0	87.2
1950	39.2	16.9	31.0	87.0	32.8	54.2	63.5	42.0	9.6	10.0	78.3
1939	4.7	1.5	3.5	9.7	1.9	7.8	6.7	4.8	–	–	13.3

*Includes Canadian subsidiary excluded in prior years.

FILE – MISCELLANEOUS

The firm of Merrill Lynch, Pierce, Fenner & Beane for its own account and/or its general partners on March 22, 1955 had no direct or indirect interest in the common stock.

The information set forth herein was obtained from sources which we believe reliable, but we do not guarantee its accuracy. Neither the information, nor any opinion expressed, constitute a solicitation by us of the purchase or sale of any securities or commodities.

Litho'd in USA

Fig. 16.2. (*cont.*)

tomers with whom it deals. The credit reporting function has become highly specialized, thorough in investigation, and impersonal in analysis. Dun & Bradstreet, the foremost mercantile agency, says to its men: "Stop for a moment and think about what you would want to know if you were

32.

FORM RS
☐ See Attached Memo
☐ Check

Dun & Bradstreet, Inc.
REPORTERS' SUMMARY FORM

STATEMENT Fin Stm't	Est	SALES	P&L P&L	Est	REF	Rptr No	Town Not Visited
☑	☐	☑	☐	☐	5	12	☐

SIC 5541 ☐ OR ☑ CD DATE 3/3/54 ☐ A ☑ N

BUSINESS NAMES
Used For Buying Del Grande, Carl
Other Texaco Service Station
Other

LINE OF BUSINESS
Service Station

ADDRESS
Town & Zone Eureka State Calif.
County Humboldt
No & St Fourth + Broadway

PRINCIPALS (Names & Titles)
☐ Copy from previous
1. ______, ______ 2. ______, ______
3. ______, ______ 4. ______, ______
5. ______, ______ 6. ______, ______
Directors:

RATING: G 3½

SUMMARY
WRITE LAST
STARTED: 1950 PAYMENTS ☑ Prompt ☑ Disc ☐ Slow ☐ Weekly ☐ Monthly
NET WORTH $ 9,775 SALES $ 120,408

Except for some slowness in collections, finances are in good shape and Del Grande is making money.

HISTORY (☐ Insert hyphen ☑ Copy from previous)
Style ☐ is unregistered ☐ registered by on Used for ☐ buying ☐ selling ☐

Owner ☐ is ☐ born ☐ married ☐ native of
Partnership formed
Incorporated on Authorized capital $ consists shares $ par Common and shares $ par Preferred

REPORTER'S NOTES
TERMS OF PURCHASE?
STARTING CAPITAL?
Amount?
Source?
FIRES?
FAILURES?

☐ See RSS

OPERATION—LOCATION (☑ Copy from previous) Note changes
☐ Retails (____%) ☐ Wholesales (____%), S.I.C. ____, ☐ Manufactures (____%) S.I.C. ____, ☐ Operates
REPORTER'S NOTES

Sells to ____ % cash, remainder ____ terms.
No. accounts ____. Territory covers ____. Employs ____
☐ Owns ☐ Rents ____ story ____ building located ____
Space occupied on floor measures by feet. Premises ☐ See RSS

SO-2 (30349) Copy Comparative Statement Summaries from ☐ previous report ☐ comparative form.

Fig. 16.3. Schedule used by Dun & Bradstreet reporter

in business and someone asked you for merchandise on credit." The firm answers its question by stating the eight keys to basic credit reporting:

Key 1. "Who owns the business?"
Key 2. "What is the background of the owners?"
Key 3. "Where did they get their capital, and how much?"
Key 4. "What exactly do they do?"
Key 5. "What do they own and owe?"

STATEMENT MADE TO DUN & BRADSTREET, INC FOR USE OF SUBSCRIBERS AS A BASIS FOR CREDIT AND INSURANCE

A financial statement at Dec. 31 1953 -cents omitted Estimated financial condition at ________ 19__
On ________ 19__

ASSETS		LIABILITIES	
1 Cash—On Hand		18 Accts Payable—Not Due	1 900
2 Cash—In Bank	2 055	19 Accts Payable—Past Due	
3 Accts Rec	3 800	20 Notes Payable	
4 Notes Rec	120	21 Owing Bank(s)	
5 Mdse ☐ Cost (Explain Other)	5 000	22 Owing	
6 U S Govt Bonds		23 Owing on Fixt & Equip	
7		24 Taxes (Fed & State)	
8		25 Accrued Expenses	
9 TOTAL CURRENT	10 975	26	
10 Fixt & Equip Misc Tools	700	27 TOTAL CURRENT	1 900
11 R E & Bldgs (Less Dep)		28 Mtges on R E	
12 Prepaid Expenses		29 Reserves	
13		30	
14		31 NET WORTH (If Prop or Part)	9 775
15		32 CAPITAL STOCK (If a Corp)	
16		33 SURPLUS	
17 TOTAL	11 675	34 TOTAL	11 675

WEEKLY ☐ MONTHLY ☐ YEARLY ☐
FROM 1-1-53 TO 12-31-53
35 NET SALES $ 120,408
36 GROSS PROFIT $
37 SALARIES AND DRAWINGS OF OWNER(S) $
38 NET PROFIT OVER AND ABOVE SALARIES AND DRAWINGS OF OWNER(S) $
39 $
40 $
41 $

REAL ESTATE (Address & Description)	Title	Value Mkt ☐ Cost ☐	Mortgage	Mortgage Due Date	☐ Annl Pay ☐ Mo Pay	☐ Annl Inc ☐ Mo Inc
1568 Sixth St.-Home	Jointly	11,000	4,000			

MONTHLY RENT $200, LEASE EXPIRES Aug 11, '57 Option Renew MONTHLY PAYMENTS $ ____ on ____ CONTINGENT DEBT $ ____ FIRE INSURANCE on MDSE $4,000, FIXTS $ ____, BLDGS $ ____ MDSE on CONSIGN $ ____

(Source of Figures)

SIGNED ________ Date March 3, 1954
Name of Business Texaco Service Station
BY Carl Del Grande TITLE Owner
BY ________ TITLE ________

REPORTER'S NOTES
TREND—Sales? Profits? Fin Condition?
EXPLANATIONS—ST items? Suits? Judgments? Condition? Losses? Slow Payments? Contingent Debt?
CURRENT INTERVIEW—Sales? Profits? Figures Up To Date?
BANK CHECK—Cash Confirmed? Loans? Terms? Relations? Reason for Loans?

Mar. 3, 1954 Del Grande reported volume has increased since he started here and now runs $12,000 monthly. Operations profitable. He stated by staying open nights this summer volume should go up to $15,000 monthly.
New statement not available this date. He reported cash now $2,000 and this is verified. Receivables now $5,100 but 25% slow. He says he will have to adopt tighter credit policies.
Del Grande stated his total debt was less than $2,500 and consists entirely of current bills. Home exempt under State laws.

☐ See RSS

PAYMENTS
☐ Buys from ____ suppliers bill to bill, ☐ other purchases cash ☒ See attached ledger experiences ☐ See experiences on TR. 13
☐

AUTHORITIES Bank 1st Nat'l Eureka Others None

Fig. 16.3. (*cont.*)

Key 6. "How are they operating?"
Key 7. "What do the figures mean?"
Key 8. "How do they pay?"

One of the tools used by a credit reporter is the schedule given in Figure 16.3. The synopsis shown in Figure 16.4, with citation to the eight keys for instructional purposes, provides a condensation of the information

4.

Dun & Bradstreet, Inc. Report — RATING UNCHANGED

5541 | CD 52 MARCH 4 1954 | N
DEL GRANDE, CARL | SERVICE STATION | EUREKA CALIF
TEXACO SERVICE STATION | | HUMBOLDT COUNTY
| | FOURTH & BROADWAY

RATING: G 3½

STARTED: 1950 — PAYMENTS: Discount & Prompt
NET WORTH: $9,775 — SALES: $120,408

SUMMARY

EXCEPT FOR SOME SLOWNESS IN COLLECTIONS, FINANCES ARE IN GOOD SHAPE AND DEL GRANDE IS MAKING MONEY.

HISTORY

The unregistered trade style is used for advertising. Ownership acknowledged by signed statement.

Del Grande born 1924, married, native Eureka, California. Professional baseball player Pittsburgh Pirates for several years. Prior to purchasing this business was employed as a laundry and dry cleaning route man for three years.

Del Grande purchased station July 26, 1950 from Leonard G. Makes. Starting capital $4,118 derived from savings. His first business venture.

OPERATION-LOCATION

Operates service station retailing Texaco gasoline and oil, tires, batteries, accessories and also does car washing, lubricating and towing. Monthly sales 30,000 gallons of gas and 500 gallons of oil. Has 8 pumps. Sales 80% for cash, remainder on 30 day terms. Owner active, three employed.

RENTS typical one-story steel and wood building on well travelled downtown street. Building in good repair; premises neatly maintained.

FINANCIAL INFORMATION

A financial statement at December 31, 1953—cents omitted.

ASSETS			LIABILITIES		
Cash in bank	$	2,055	Accts Pay	$	1,900
Accts Rec		3,800			
Mdse		5,000			
Notes Rec		120			
Total Current		10,975	Total Current		1,900
Fixts, Machy, Tools		700	NET WORTH		9,775
Total Assets		11,675	Total		11,675

REAL ESTATE	TITLE	VALUE	MTG
1568 Sixth St., Home	Jointly	$11,000	$4,000

Sales from 1-1-53 to 12-31-53, $120,408. Monthly rent, $200. Lease expires August 11, 1957. Option to renew. Fire insurance on merchandise $4,000.
Signed Mar 3, 1954 TEXACO SERVICE STATION by Carl Del Grande, Owner

-----0-----

March 3, 1954 Del Grande reported volume has increased since he started here and now runs $12,000 monthly. Operations profitable. He stated by staying open nights this Summer volume should go up to $15,000 monthly.

New statement not available this date. He reported cash now $2,000 and this is verified. Receivables now $5,100 but 25% slow. He says he will have to adopt tighter credit policies.

Del Grande stated his total debt was less than $2,500 and consists entirely of current bills. Home exempt under state laws.

PAYMENTS

HC	OWE	P DUE	TERMS	March 2 1954	
450	275		2% 10-30	Disc	Sold 8-52 to date
600			Net 30	Prompt	Sold 1952 to date
350	135		2%-10-30	Prompt	Sold 10-52 to date

(4) Sell load to load basis. Very satisfactory account.
3-4-54 (12 49) Three

PLEASE NOTE WHETHER NAME, BUSINESS AND STREET ADDRESS CORRESPOND WITH YOUR INQUIRY.
The foregoing report is furnished at your request, under your Subscription Contract, in STRICT CONFIDENCE, by DUN & BRADSTREET, Inc. as your agents and employees, for your exclusive use as an aid in determining the advisability of granting credit or insurance, and for no other purpose. DB3-3 (88976)

Fig. 16.4. Dun & Bradstreet information report

needed by a sales or credit manager to reach a decision regarding the desirability of a customer or prospect. In more complicated cases, where a careful study of the entire report is necessary, the synopsis serves as an introduction to the detailed information that follows.

WRITING THE CREDIT REPORT

The value of clear statement in credit reports is emphasized in Dun & Bradstreet training programs by the following statement:

> The objective of good writing in Dun & Bradstreet is to convey the idea you have to the reader of your report. Nothing fancy. Just clear thinking and a simple, direct style.
>
> Here are some ideas . . .
>
> —Use the small, everyday words that are understood by everybody. You need only the use of 300 "easy" words to write all the reports you will ever write. Furthermore, the more you understand the case, the more your words will tend towards simplicity.
>
> —Keep sentences short. Complex sentences make for hard reading.
>
> —Punctuation makes the sentence clear, and without punctuation the meaning might be entirely changed. If you write your reports out in longhand, exaggerate the size of punctuation marks so that they can be seen. Leave spaces between sentences so the typist can see where one starts and another ends.
>
> —Give consideration to the problem of the typist. Get to know the typist who is doing your work. She can give you valuable suggestions as to how you can help her. She is just as much interested as you are in turning out a good looking, easily readable report.

CREDIT INTERVIEWING

The instructions to Dun & Bradstreet reporters are so generally applicable to the whole field of information gathering that they deserve special attention. Here they are:

1. *Meeting the Public*—Meeting the public calls for observing five simple rules:

   Be Neat—It is an old story that people tend to judge on first impressions. They shouldn't, but they do. Nine out of ten men need pay no attention to this admonition. If you are the tenth, think about it.

   Be Pleasant—This doesn't mean that you should be either familiar or breezy. Still, don't look *too* serious. Life is earnest, but life is also gay. "I'm not mad at anybody" is a good way to be.

   Be Sincere—People you call on are quick to appreciate this quality and nothing is more apt to interfere with cooperation than the lack of

sincerity, particularly when it is represented by an overly ingratiating mannerism.

Be constructive in your thinking. Be mindful of the favorable as well as the unfavorable. Search for the strength as well as the weakness.

Be Willing to Listen—This is hard for all but older people and wise people.

2. *Preparing for an Interview*

Many newer reporters, when starting out on the job, tend to be nervous, sometimes a little scared. It is a perfectly normal thing to feel that way.

Think over the reasons why you are calling for information. Remember this—your motivation is always to do the businessman some good.

Some reporters tend to think of themselves as standing in judgment on the credit standing of the merchant. There is credit judgment involved but this very responsibility should always lead to a sober appreciation and should eliminate any sense of bluster. Don't tell a reluctant merchant that if he doesn't give you the information you want, you will write a report which will be prejudicial to his credit standing.

There are no ultimatums in this business!

No worthwhile interview is possible if you haven't a good idea in your mind as to what you are trying to find out. The difference between a thorough report and a weak one is frequently the matter of taking out a couple of minutes to read over the body of the report and make mental notes just before the interview is to be made.

Resolve to make your report better than the one the last man wrote.

If the report is an OR, of course, it will be pretty difficult to anticipate just what is going to happen. Look around and size up the place while waiting to introduce yourself to the person whom you are going to interview. Sometimes, there will be some preliminary information in the form of trade style registration details or corporate details handed to you in the office, or you may have some advance notice of a chattel mortgage or sales lien filed just before the store was opened.

3. *Conducting the Interview*—The majority of businessmen we interview are quite cooperative. They will provide us with some information, even if we cannot always persuade them to issue figures to us exactly when we want them. At the same time, no two merchants react exactly the same after the interview has been opened.

WATCH, ASK AND LISTEN.

During some of your investigations you may have cause to use the telephone to get information. The telephone is a supplementary aid but does not take the place of a direct, personal call. Discuss the use of the telephone with your supervisor.

4. *Testing and Checking*—A more appropriate title for this would be, "Using your head in investigating."

Your supervisor will be glad to furnish you with cards indicating typical sales and stock turnovers. You don't have to learn them in detail, line for line, but it is a good idea to become generally familiar with a few of the lines. Thus, if a man tells you that he has $40,000 in stock and does $30,000 in sales, you will know immediately that additional questions are needed. It is not a normal situation for a retailer to carry inventory that will carry him for more than a year.

5. *Outside Confirmation*—No matter how cooperative the interview, some information you obtain is going to require confirming. How much time you give it is a matter of judgment, and this is going to require experience.

   Claims of a relatively large cash balance should be confirmed at the bank. If the businessman is borrowing from the bank, details should usually be checked carefully. If the businessman says that his trade payments have improved since the last trade clearance, we will want to confirm that.

   On the other hand, it is unnecessary to spend valuable time confirming minor details which do not have a great deal of bearing on the situation. Generally speaking, we check the accuracy of information given to us in order that the report will make sense and be reasonable in the eyes of the person who is going to use that report.

   When people are going into business for the first time, we should confirm their prior record of employment with the former employer. If it is claimed that the starting capital represents loans from friendly outside sources, the names of those sources should be obtained and consulted for confirmation of the loan details. Once again, the extent of confirmation is directly proportionate to the pertinency of the information forwarded.

6. *Inside Investigating*—The investigating that we do inside the office is sometimes more valuable than what we obtain from our outside contacts. This is particularly true in establishing antecedents. If a businessman who has just opened tells us that he was previously in business, the chances are good that we formerly had a report on him. The previous report will have information bearing on the past business success, whether or not there were any bankruptcies, fires or criticized business activities.

THE "REFERENCE" BOOK

Six times a year—in January, March, May, July, September, and November—Dun & Bradstreet issues a *Reference Book Listing* giving information about almost three million enterprises in the United States and Canada. Each page of this volume, as Figure 16.5 indicates, contains a wealth of commercial report information. The books are loaned, never sold, to subscribers and remain the property of Dun & Bradstreet. Listings in "The Book" are used to set sales objectives, select prospects, appraise accounts, verify first orders, and prepare mailing lists. In conjunction with credit reports, "The Book" is a valuable sales and credit tool.

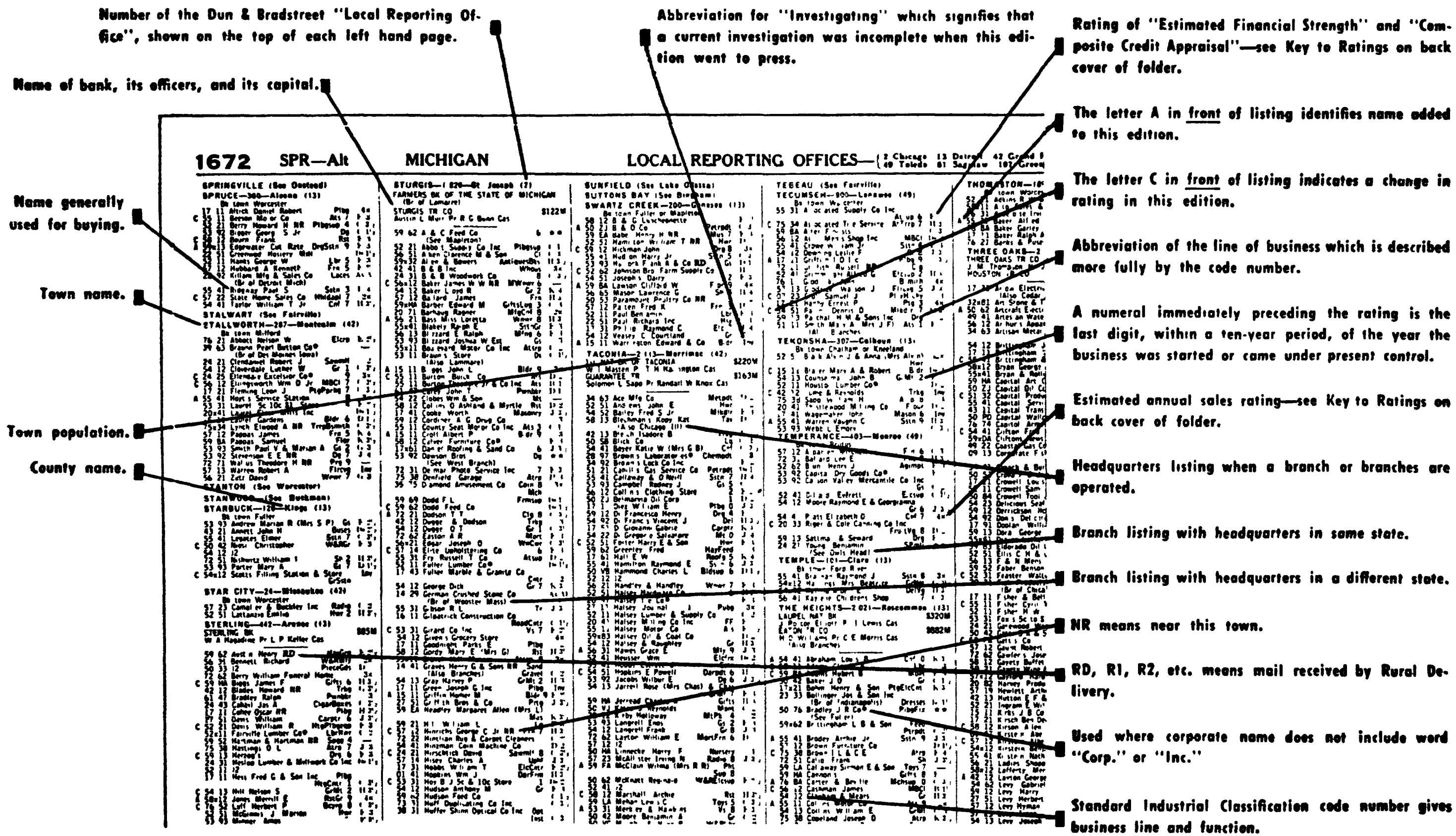


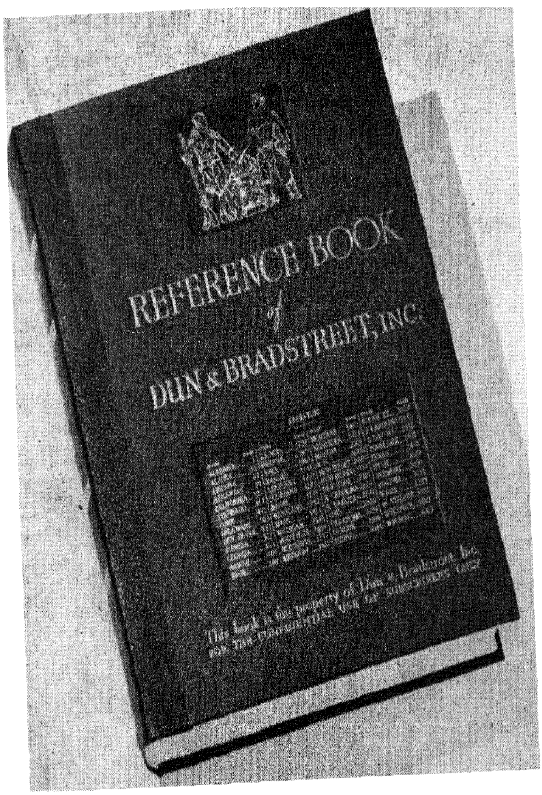
Fig. 16.5. Dun & Bradstreet reference book page

READINGS

The Dun & Bradstreet Reporter: His Job and His Future. New York: Dun & Bradstreet.

DUN & BRADSTREET, *Reference Book* (Bi-monthly, January, March, May, July, September, November).

GUTHMANN, H. G., *The Analysis of Financial Statements,* 4th ed. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1953.



How to Read a Financial Report. New York: Merrill Lynch, Pierce, Fenner and Beane, 1954.

SHULTZ, WILLIAM and HEDWIG REINHARDT, *Credit and Collection Management,* 2nd ed. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1954.

STEINER, WILLIAM HOWARD and HOWARD S. KANE, *Credits and Collections.* Ames, Iowa: Littlefield, Adams & Company, 1950.

TRY YOUR HAND AT THESE •

- **to gain experience in drafting information reports**
- **to develop habits of analysis**
- **to encourage orderly presentation of data with attention to relative importance of data**

1. Develop a one-page information report which gives the essential data about a college or university.
2. Prepare a one-page information report which gives the essential data about the career on which you are writing.
3. On the basis of information given in the synopsis in Figure 16.4, write a letter to a bank requesting a business loan in an amount which you feel the facts justify.

17

THE RESEARCH REPORT

FROM TWENTY-FIVE YEARS OF STUDIED EXPERIENCE GENERAL MOTORS has developed a pattern for writing research reports. Because the idea and the format are still somewhat revolutionary, the underlying theory needs discussion.

IMPORTANCE OF CLEAR, SIMPLE STATEMENT

The GM research report assumes the importance of clear statement in simple, understandable English. Ralph S. Richardson, head of the technical data department of General Motors Research Laboratories, says that the discipline given to technical writers preparing materials for nontechnical readers has taught GM many of the "ground rules" for use in the composition of technical research reports. "We have learned," he points out, "that simple explanations and the avoidance of highly technical terms are the most important factors in any technical writing." From his years

of specialization in the field of technical writing for technical readers, Richardson says categorically that "we have never had a report submitted by an engineer in our organization in which the explanation and the terms were too simple!"

STRUCTURE OF THE RESEARCH REPORT

On the foundation of clear statement, GM "packages" its reports in a format designed to encourage reading. Each page of the presentation has its own reason for inclusion. The logic of the GM research report begins with the cover and the quality of the binding. The cover takes a design so distinctive that the report will stand out among other documents on a desk like a top hat in a parade. The GM standardized research report cover is a two-tone brown cardboard binder like the one shown in Figure 17.1. This cover is prepared with a window which focuses attention on the title of the report. The report is bound with spiral or wire binding so that it will lie flat on the desk or bench when opened.

The title page, shown in Figure 17.2, comes next to the cover. It contains the essential record and descriptive data. It states the project and gives the report number as assigned by the secretary of the department in which the work has been done. The title sheet locates the subject of the report in the center of the page so that it can be seen through the window of the cover. It states the number of pages, the date, the name of the writer, and the necessary approvals by department head and technical director.

The table of contents shown in Figure 17.3 follows the title page. This gives an overview of the sequence of the presentation. The sections are stated without numbering but with citations to the pages on which the various subjects begin.

After the mechanical facts about the make-up of the report have been given on the title and contents pages, the research report organizes its material into five sections. The theory behind the sequence and style of these sections rests on the premise that reports are read by people in various positions and from different points of view. The busy executive, interested only in the highlights of the investigation, may be satisfied with short, concise (1) statement of the problem, (2) conclusions arrived at, and (3) recommendations proposed. On the other hand the engineer may want more detailed information. He may wish to know how the tests were conducted, what instruments were used, and how the data analyzed were compiled. Ralph Richardson says:

> General Motors tries in every way to make the using of reports as painless as possible. This is an important goal to strive for. We are human and don't do any more hard studying than we have to. Our reports compete for the time of executives and engineers. Unless the report is easily read and understood, it is valueless in getting the information to those who will benefit from it. We know

that most technical reports and papers will only be read in detail when someone has an immediate problem which the information in the report may help to solve. We want the men in our organization to read at least the foreword and conclusions of all reports which reach their desk so that they will be familiar with what has been done by other engineers and technical men. The report must be written in such a way that it has a fair chance of competing for reader attention against all other written material.

The five sections which comprise the body of the research report are: (1) foreword, (2) conclusions, (3) recommendations, (4) discussion, and (5) attachments including tables, photographs, drawings, curves, and bibliography. Each of these sections occupies a page or pages of its own, even when the text runs to only a few lines. The presentation of a brief text stated in simple, direct words on a page with very wide borders and quantities of white space gives to the reader an impression that he can actually read such a brief presentation in the time which he has available. The reading looks easy!

The foreword introduces the report and defines the purpose and scope of the inquiry. It may explain why the work was undertaken, who authorized the project, and show how other reports relate to this one. If one studies the foreword presented in Figure 17.4, he will see that it follows a standard pattern required in all good research.

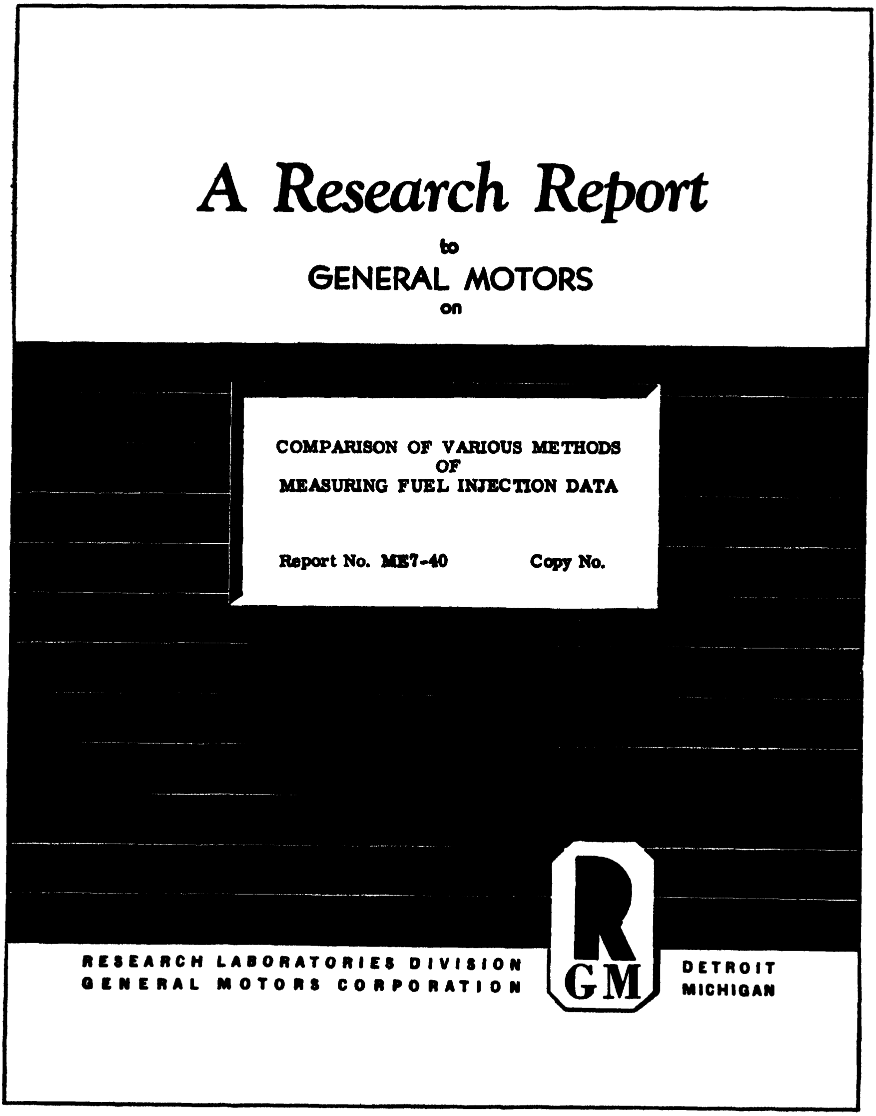
Research concept	
1. *Statement of problem in terms a busy layman can understand from his own experience*	"New as well as old automobiles may occasionally be seen leaving a *trail of smoke from the exhaust pipe.*"
2. *Means proposed to investigate this problem*	"In order to determine the conditions under which exhaust smoke is formed in an automotive type engine, *an investigation of the effects of both carburetion and oil consumption* was
3. *Materials and resources used in the investigation*	made using a laboratory *single cylinder Oldsmobile engine.* Smoke density was measured with *a device that filtered the suspended material from the exhaust gases.*"
4. *Limitation of scope of the inquiry*	"Consequently, the results reported here are concerned with the *physical rather than the chemical nature of the exhaust.*"

The purpose, scope, and method of the inquiry are stated in a single paragraph of eighty-nine words; four out of five do not exceed two syllables in length and none are technical concepts.

On the next full page the conclusions follow the foreword. They are presented, as Figure 17.5 indicates, in numbered sequence with high visi-

bility achieved by alphabetical subsections and deep margins which provide large quantities of white space. What are commonly known as "findings" are incorporated in the conclusions statement.

The recommendations page, an example of which is given in Figure 17.6, follows the conclusions. Recommendations summarize suggestions which require further action by appropriate authorities. They are based on the



A Research Report

to

GENERAL MOTORS

on

COMPARISON OF VARIOUS METHODS
OF
MEASURING FUEL INJECTION DATA

Report No. ME7-40 Copy No.

RESEARCH LABORATORIES DIVISION
GENERAL MOTORS CORPORATION

DETROIT
MICHIGAN

Fig. 17.1. Report cover—General Motors Research Report

experience and best judgment of the reporting engineer. Each recommendation is presented in a separate paragraph. Often these recommendations are numbered for easy reference.

The drafting of the foreword, conclusions, and recommendations constitutes the most difficult task in research writing. The reporting engineer possibly knows more than anyone else in the world about the subject of

Project No. 10-R-8 **Number of pages: 24**

RESEARCH LABORATORIES DIVISION
GENERAL MOTORS CORPORATION

Detroit, Michigan

COMPARISON OF VARIOUS METHODS
OF
MEASURING FUEL INJECTION DATA

Report No. ME7-40 **Copy No.**

This report is prepared for the information of the management and engineering groups of General Motors Since it covers the policies and programs of the Research Laboratories Division, the information should not be disclosed without authorization.

Reported by:

Ralph J. Wehrman,
Mechanical Engineering Dept. No. 7

Approved by:

Wm. A. Turunen, Head
Mechanical Engineering Dept. No. 7

H. C. Mougey, Technical Director November 1, 195_

Fig. 17.2. Title page—General Motors Research Report

his report. He is overwhelmed with data which must be digested and arranged for simple, concise presentation. He is compelled, for example, to write a foreword of 89 words telling about his problem, describing his strategy and tactics in attacking the problem, identifying the apparatus which he used, and pointing out the limitations of his inquiry. He must do this without using technical jargon or many polysyllabic words. He states

TABLE OF CONTENTS

Fig. 17.3. Table of contents—General Motors Research Report

his conclusions, as shown on the page presented as Figure 17.5, in 175 words of short, simple nontechnical language. He puts his recommendations in 59 words. To make clear statement in concise and easy-to-read format requires reportorial skill.

The discussion follows the recommendations or the conclusions if no recommendations are included. This discussion narrative constitutes the

FOREWORD

New as well as old automobiles may occasionally be seen leaving a trail of smoke from the exhaust pipe. In order to determine the conditions under which exhaust smoke is formed in an automotive type engine, an investigation of the effects of both carburetion and oil consumption was made using a laboratory single cylinder Oldsmobile engine. Smoke density was measured with a device that filtered the suspended material from the exhaust gases. Consequently, the results reported here are concerned with the physical rather than the chemical nature of the exhaust.

1

Fig. 17.4. Foreword—General Motors Research Report

body of the report and contains the data collected during the investigation. These data may be tabulated or charted. They are usually explained and interpreted, as the context requires. Whenever it is possible, numerical test results are placed under a separate heading. The discussion narrative is directed toward the technical man who wants to go into the report procedure in some detail.

CONCLUSIONS

1. The following factors were found to affect the presence of smoke in the exhaust from a single cylinder gasoline engine:
   a. Air-fuel ratios richer than 10:1 cause black smoke in the exhaust gases. These mixtures are richer than those found in normal car operation, which range from 11:1 to 14:1. (See OC Technical Memorandum 21-165.)
   b. Oil at concentrations greater than 60 cc per gallon of fuel causes smoke in the exhaust gases. This minimum concentration corresponds to an oil consumption of four quarts of oil per 1000 miles of car operation, provided that all of the lost oil is consumed in the combustion chambers.
   c. The density of the smoke resulting from burning oil in the combustion chambers decreases as engine speed is increased.

2. The following factors were found to have little or no effect on the presence of smoke in the exhaust gas:
   a. Molecular structure and hydrogen to carbon ratio of fuel, four different hydrocarbons studied.
   b. Fuel volatility, two gasolines studied.
   c. Spark advance, two settings studied.
   d. Throttle position, air-fuel ratio maintained constant at all throttle settings.

3

Fig. 17.5. Conclusions—General Motors Research Report

The final section of the report presents supporting details. These attachments include: (1) tabulations of data, (2) photographs, (3) drawings, and (4) curves in the order named. There is, however, no fixed rule which requires this kind of material always to be grouped at the end of the report. The guiding principle for the presentation of this detail is flexible. It

RECOMMENDATIONS

A STUDY SHOULD BE MADE TO DETERMINE THE RELATIONSHIP BETWEEN THE HEAT LOSSES WHICH OCCUR DURING COMBUSTION AND EXPANSION OF THE CHARGE AND THE THERMAL CONDUCTIVITY OF THE HEAD MATERIAL.
IT IS FURTHER RECOMMENDED THAT AN INVESTIGATION BE MADE OF THE CAUSES OF THE INCREASE IN HEAT LOSS OCCURRING WHEN THE FLOW OF COOLANT THROUGH THE HEAD IS RESTRICTED.

Fig. 17.6. Recommendations—General Motors Research Report

requires arrangement so that the information is most convenient for use and reference. The method of assembling the supporting detail, distributing it in the text, or concentrating it in an appendix is left at General Motors to the discretion of the author of the report and his department head. In preparing the supporting documents the writer sees that all materials from which blueprints are to be made are included. Curves and drawings are labeled in the lower left-hand corner when possible. When typewritten materials, including mathematical symbols, are to be blueprinted, General Motors writers do such typing on light onionskin paper, using carbon paper placed backwards so that a carbon imprint is made on the back of the sheet.

General Motors urges its investigators to take photographs of operations at the time the experiment or operation is being conducted. Much grief results at the report-writing stage if the pictures have not been planned and shot at the proper time. The photographs should be planned by careful thought, so that they describe the most significant relationships in the most interesting and engaging form.

In summary, then, it may be said that a research report of the type used by General Motors Research Laboratories has this pattern: an attractive, standardized cover with window framing the title of the report, a title page giving the record information, a page devoted to contents, a page devoted to the foreword, a page devoted to conclusions, a page devoted to recommendations, pages devoted to discussion, and a concluding section presenting the supporting details. In commenting on the General Motors format, Richardson says that it is "false economy to scrimp on a report which represents the spending of anywhere from ten to a hundred thousand dollars and years of time."

TRY YOUR HAND AT THESE •

- **to become familiar with the structure of a General Motors Research Report**
- **to adapt the form to your own purpose**
- **to give practice in the use of the research report**

1. Prepare a dummy of the research report you propose to submit in completion of your research project.
2. Write an analytical letter to a research student explaining why you feel he would find it advantageous to make a report in this form.
3. Prepare a project research report in this form.
4. Design an experiment to test the assertion of a lady that by tasting a cup of tea made with milk she can discriminate whether the milk or tea infusion was first added to the cup. Write up the project in research report form.

18

LONG-FORM REPORTS

PROBABLY THE MOST GENERALLY USED REPORT FORM IS KNOWN AS THE "long form." The structure of this kind of report is based on the theory that the document should record the steps of the investigation in the order in which they were taken. Figure 18.1 represents the well-established pattern of the long-form report.

NEGOTIATING DOCUMENTS

Because of its formal nature, the long-form report gives attention to the documents which initiated the study and those which formally terminate the project. There are five basic documents which together may be classified as the negotiating letters. The letter of authorization initiates the project. The letter of acceptance acknowledges the authorization and generally restates the problem for clarity. When the project is completed, three negotiating documents are generally used. The research team or

subcommittee delivers its report with a letter of submittal (Fig. 18.3). Such a letter is common practice in congressional committee proceedings. The document is then delivered with a letter of transmittal to the authorizing agency (Fig. 18.4 and Fig. 18.5). The project formally terminates when the authorizing agency acknowledges the receipt of the report and accepts it. Few reports include all the negotiating documents. Almost always, long-form reports include a letter of transmittal.

REPORT NARRATIVE

The long-form report narrative is usually divided into six parts.

LONG-FORM REPORT PATTERN

COVER: (1) Attractive to the eye, (2) clear in its statement of the subject, and (3) strong enough to stand hard use.

TITLE PAGE: (1) Statement of the name and division of the company making the report, (2) the subject of the report, (3) the name and position of author and (4) the person, firm, or group for whom the report has been prepared.

SYLLABUS: (1) Summary highlighted for quick reading, (2) concise statement of findings, (3) conclusions, and (4) recommendations.

NEGOTIATING DOCUMENTS

1. *Letter of authorization*	2. *Letter of acceptance*	3. *Letter of submittal*	4. *Letter of transmittal*	5. *Letter of approval*
Who asked for what kind of a study and why?	Clear statement summarizing problem and acknowledging authorization	Note by which a staff delivers completed work to a superior committee	Formal statement delivering report document to sponsors of inquiry, summarizing in a sentence the significance of the report and commenting on probable usefulness	Statement of sponsor acknowledging receipt of report, expressing satisfaction with the work done

CONTENTS: Key-word description of the sequence of major topics, to give sections overview of the whole report by reference to pages on which discussion of topic begins.

TABLE OF ILLUSTRATIONS; LEGAL CASES: Tables, charts, figures, illustrations, and legal cases with pages on which they appear.

REPORT NARRATIVE: Tells the story of what was done; states the problem, the methods of attack and work performed.

1. *Problem:* Description and explanation of scope.
2. *History of problem:* Background of the problem; why it was undertaken; why it is important; probable significance of the results of the inquiry.

Fig. 18.1

3. *Definition of terms:* Clear statement of meaning of any special concepts used in the report.
4. *Method and procedure:* Description of how the problem was attacked.
5. *Materials and apparatus:* Discussion of what supplies were required in the operation.
6. *Discussion:* Presentation in well-organized form of the data gathered in the investigation.

SYNTHESIS AND CRITIQUE:

1. *Findings:* A systematic statement of what discoveries the investigation has produced.
2. *Conclusions:* Discussion of the findings as the reporter evaluates their importance.
3. *Recommendations:* Numbered inventory of suggestions for dealing with the problem on the basis of the finding and conclusions.
4. *Summary critique:* Concluding remarks of reporter as he looks upon the whole inquiry.

NOTES: Footnote references organized in one section unless they are entered at the bottom of pages where reference is made.

EXHIBITS: Consolidated reference section of materials not distributed throughout text

1. *Tabulations of data*
2. *Photographs*
3. *Drawings*
4. *Curves*
5. *Other materials*

BIBLIOGRAPHY: Volumes considered as important for the reader and record of reference books and articles used in developing the report.

INDEX

Fig. 18.1. ***(cont.)***

The first clearly states the problem. The second gives its history, background, and the probable significance of the results of the inquiry. The third provides a definition of terms. The fourth explains the methods and procedures. The fifth catalogs the materials and apparatus employed. The sixth discusses in a well-organized form the data gathered in the inquiry.

SYNTHESIS AND CRITIQUE

Following the narrative, the long-form provides for a section devoted to synthesis and critique. The first unit in this section tells what the investigator found out. The second states his conclusions. The third presents his recommendations. The fourth presents a summary critique.

SYLLABUS

From a review of his whole report, the writer then prepares a syllabus to follow the title page. This section summarizes the highlights of the report for quick reading.

The General Electric Company includes in its long-form reports a syllabus summary like the one shown in Figure 18.2. It follows the title

FOR USE OF G-E EMPLOYEES ONLY

GENERAL ELECTRIC

Research Laboratory

SCHENECTADY, NEW YORK

TECHNICAL INFORMATION SERIES

Title Page

AUTHOR	SUBJECT CLASSIFICATION	NO / DATE
Martin, Miles J	reporting procedures	RL-542 / June 1951

TITLE Reporting Procedures in the General Electric Research Laboratory 63-205

ABSTRACT
This memorandum discusses the types of technical reports issued in the Research Laboratory and includes recommendations for preparation of copy and illustrations for reports issued by Research Laboratory Publications.

G E CLASS / GOV CLASS	REPRODUCIBLE COPY FILED AT	NO PAGES
1	Research Laboratory Publications	8

CONCLUSIONS

By cutting out this rectangle and folding on the center line, the above information can be fitted into a standard card file.

INFORMATION PREPARED FOR Research Laboratory

TESTS MADE BY

COUNTERSIGNED DIV.

DIVISIONS LOCATION

FN-610-IM-RL (2-50)

Fig. 18.2. Long-form abstract for card file

page and gives an overview of the whole report. The sheet is so designed that the rectangle can be cut out, folded on the center line, and fitted into a standard card file.

LETTER OF SUBMISSION

COMMISSION ON INTERGOVERNMENTAL RELATIONS,
WASHINGTON, D. C., *September 30, 1954.*

The Honorable MEYER KESTNBAUM,
Chairman, Commission on Intergovernmental Relations.

DEAR MR. KESTNBAUM:

Your Study Committee on Federal Aid to Agriculture has completed its studies and deliberations and has the honor to transmit herewith its report, dealing with intergovernmental relations in the field of agriculture.

The members of the Committee feel highly privileged to have been able to share in the historic undertaking in which the Commission on Intergovernmental Relations is engaged. We have approached our particular task with a deep sense of responsibility and humility. We trust that our findings and recommendations will be helpful in clarifying certain troublesome areas of relationships now prevailing among the various levels of government in the conduct of agricultural programs.

Respectfully submitted,

R. I. NOWELL,
Chairman.
PHILLIP F. AYLESWORTH,
EDWARD J. CONDON,
FRED B. GLASS,
FREDERICK LAWSON HOVDE,
W. C. JACOBSEN,
JOHN A. LOGAN,
HERSCHEL D. NEWSOM,
ROBERT A. ROWAN,
ANDREW F. SCHOEPPEL,
Members.
Study Committee on Federal Aid to Agriculture.

Fig. 18.3

LETTER OF TRANSMITTAL

WASHINGTON, D. C., *February 5, 1955.*

DEAR SIRS: In accordance with Public Law 108, approved July 10, 1953, the Commission on Organization of the Executive Branch of the Government, through the assistance of various task forces, has studied the operation, organization, and policies of the Government in certain broad areas of governmental functions. It submits herewith to the Congress a Task Force Report on Lending Agencies, prepared for the Commission's consideration.

The conclusions and recommendations of the task force were reviewed by the Commission in reaching its own conclusions, but the Commission's own recommendations may not necessarily coincide in all respects with those of the task force.

The Commission's report on this subject is also being submitted to the Congress.

The Commission takes this opportunity of expressing its appreciation to the Task Force Chairman, Mr. Paul Grady, of Price Waterhouse & Co.; to the Task Force Members; and to their staff for the painstaking investigation made and for the preparation of this report.

Respectfully,

Chairman.

The Honorable
The President of the Senate
The Honorable
The Speaker of the House of Representatives

Fig. 18.4

THE ANONYMOUS CHEMICAL CORPORATION

Cable Address: ANCORP | 130 Flatbush Avenue, New York 11 | Telephone: STerling 5-0207

February 12, 195x

Registered mail

Mr. F. E. Buelling, President
Pacific Development Corporation
173 Oregon Avenue
San Francisco, California

Dear Mr. Buelling: Philippine Island Superphosphate Fertilizer Project

On October 5, 195x the Pacific Development Corporation engaged the services of The Anonymous Chemical Corporation to study and report on the technical and economic feasibility of a project for the production of superphosphate fertilizer in the Philippine Islands.

This report, prepared in pursuance of this agreement, is based on data from two primary sources:

a. inspection of local conditions and resources in the Philippine Islands.

b. staff work of the Corporation's engineers in New York.

The importance to the national economy of the Philippine Islands of the recommended project for the production of 45,500 metric tons per year of superphosphate fertilizer is clearly and conservatively established in this report. The discussion presents supporting data covering the economics of the plant, preferred site location, the cost of production, and estimated expansion necessary to meet future requirements of the country.

Very respectfully yours,

Guy Adams

Technical Vice President
The Anonymous Chemical Corporation

Fig. 18.5. Letter of transmittal

FORM WHICH ENCOURAGES WRITER TO WRITE

Reports of the General Electric Company tend to follow the pattern of the long form with conclusion and recommendation coming at the end of the report after the narrative discussion. Within the general pattern of the orthodox long-form report General Electric writers, however, follow a pattern pretty much to their own liking. One writer may simply divide his presentation into (1) Introduction, (2) Formulation, and (3) Experimental Results. Another may arrange his chapters as (1) Historical Introduction, (2) Laboratory Phase, (3) Field Observation Phase, (4) Flight Experiments, (5) Conclusions, (6) Recommendations, (7) Acknowledgments, (8) References, and (9) Distribution List for Report. The design of the report fits the pattern of the project reported upon according to the way the engineer thinks about his work.

The General Electric Research Laboratory encourages its writers to use any form which will stimulate them to write. Miles J. Martin, editor of General Electric technical publications, operates upon the assumption that scientists and engineers ought to be encouraged to write "in the way that seems easiest to them." "It is difficult," says Miles, "to get the technical men to write at all. Within the laboratory they feel at home. They know their way around. They sense their power. They resent being sidetracked from what they consider their 'work' merely to write. It is both their virtue and their fault that engineers find their research so all-absorbing that they want to keep at it without interruption."

Acting upon this assumption that the editor ought to encourage each engineer and scientist to write in the way that comes easiest to him, General Electric insists on no uniform pattern of report organization. The editors keep telling the research staff that they can read anything the research staff can write—"however bad." When a writer appears with a manuscript, the editors give him every possible assistance. They attempt to take from his shoulders "all the mechanical dirty work" which goes with editorial activities. As a result of such prompt, courteous, sympathetic editorial service, research men come to respect the reports office. In developing a manuscript the editors do everything in their power to produce a report of which the writer will be proud. Miles has built much of his effective editorial service upon the good will which results from this kind of "non-directive report writing." Such an approach encourages writing.

TECHNICAL WRITING FOR THE GENERAL READER

With increasing frequency, report writers face the necessity of explaining complex research developments to the general reader. In the General Electric Research Laboratories, Dr. James Stockley, the distinguished

By permission of General Electric Co. and Pictorial Media, Inc.

Fig. 18.6. Non-technical presentation of idea

astronomer and science writer, has as one of his jobs the task of making scientific research understandable to the masses.

One of the best examples of presenting a technical subject to a popular audience is the story of "cloud seeding" or "rain making" as the operation is popularly called. Over a period of five years the General Electric Research Laboratory in cooperation with the United States Army, Navy, and Air Force conducted laboratory, field, and flight research in cloud physics and experimental meteorology under contract with the Signal Corps. The operation was named "Project Cirrus," descriptive of the thin, fleecy clouds which appear at great altitudes and which consist of minute ice crystals. During the five-year period, project scientists issued progress reports and occasional reports. They published papers in scientific books and periodicals. Encyclopedic reports summarized the project; and a final 170-page report, tying the record together, made conclusions and recommendations. In the course of the inquiry, newspaper readers developed keen interest in "rain making." To give the public an accurate story of the project in nontechnical language, General Electric issued a 26-page brochure discussing Project Cirrus. With generous photographic illustration and easy-to-read text this booklet stands as one of the best industrial examples of technical writing for nontechnical readers. Its careful study will reward any technical writer. Copies may be obtained upon request to the General Electric Company, Schenectady, New York, for *Project Cirrus: The Story of Cloud Seeding.*

Stockley thinks that one of the best disciplines for the technical writer is to see how much he can simplify his presentation by "explaining" big ideas in terms of commonplace experience. General Electric issues an "adventure series" which presents science information in the form of comic strips. Figure 18.6 gives an example of a popularized presentation of "Adventures in Jet Propulsion."

TRY YOUR HAND AT THESE •

- **to learn the structure of the long form report**
- **to practice in its design**
- **to provide an opportunity to write a long-form report**

1. Write a memorandum comparing the research and long-form reports.
2. Working with your outline draft of your career report, prepare a dummy to show the format you are going to use.
3. Write your report on your career field in the long-form report format.

19

THE SCIENTIFIC PAPER

THE SCIENTIFIC PAPER REPORTS THE RESULT OF RESEARCH FOR THE information, study, and criticism of professional colleagues. It shares experience; it accelerates the growth of pure and applied science. Except among personnel pledged to secrecy by military or industrially-competitive necessity, the publication, circulation, and exchange of information about discoveries made in the laboratory constitute a basic activity in a society in an age of advanced technology. Scientific society is "open" in the sense that scientists desire to make their findings known and to have the benefit of the comment of their professional associates on the integrity and value of their performance.

Industry and universities alike encourage staff and faculty members to discuss and to publish new ideas. Such publication produces a series of benefits. It provides a means to keep professional people acquainted with new developments in a field. It stimulates professional friendship. It

identifies the man who is doing specialized work. It indicates where such work is being done. It keeps industry in touch with the universities and the professions, and the universities and professions in touch with industry.

Recognizing the value of the scientific paper to technological progress, major industries encourage their experts to write, publish, and to participate in professional associations. Corporations such as General Motors, General Electric, and Westinghouse make it a matter of corporate policy to give generous assistance to research workers in circulating their findings

1. TITLE
2. BY-LINE
   author's name, institutional or company connection, city and state
3. ABSTRACT
4. BODY
   section headings, subheadings, mathematical materials, tables, figures
5. REFERENCES AND NOTES
6. APPENDIXES
7. ACKNOWLEDGMENTS
8. BIBLIOGRAPHY
9. TABLES
10. TITLES, LEGENDS, OR CAPTIONS
    for figures and illustrations
11. PHOTOGRAPHS AND ILLUSTRATIONS
    including graphs, charts, diagrams, sketches, and line drawings.

Fig. 19.1. Pattern for organization of scientific paper

among scientists. Some idea of the importance of research publications can be gained by noting the fact that, in the seven years between 1926 and 1933 before he became president of Harvard University, James B. Conant published over eighty papers in various scientific journals. During this period he was doing his most active research on cholorphyll, hemoglobin, hemocyanin, free radicals, dyes, absorption, and the spectra of organic compounds at liquid air conditions.

C. G. Suits, vice-president and director of research, General Electric Company, places a very great importance upon the publication of scien-

tific papers by research men. He says that the "right to publish scientific results" is an important prerogative of the scientist. As policy, General Electric encourages publication, unless an effective patent procedure or productive method is involved. Dr. Suits says that in General Electric experience, publication of technical papers has "never led to a competitive disadvantage."

Title in Twelve-Point Boldface Upper and Lower Case

AUTHOR'S NAME IN EIGHT-POINT CAPITALS AND SMALL CAPITALS
Institution in Eight-Point Italics

The abstract is written in eight on nine-point type This refers to an eight-point font mounted on a nine-point base which gives more space between the lines than eight point on eight (known as eight-point solid). The abstract is set in two columns if it is, longer than twenty lines; in one column of thirty-one-pica width if less than twenty lines long.

THE body of the text starts with a twenty-four point Caslon boldface initial The text is printed in ten on eleven-point type, nineteen picas in width for a single column

PRINTER'S MEASURE

The printer's unit of measurement is the *point*, which is approximately one seventy-second of an inch. The standard of measurement, however, is the *pica*, which is twelve points or one-sixth of an inch In practice, we speak of our page size as thirty-nine×fifty-three picas, our column width as nineteen picas, type sizes are spoken of as twenty-four point, eighteen point, twelve point, ten point, eight point, and six point

Subordinate Material

This material is set in eight on nine-point just to show how subordinate material or occasional listings are set in smaller type in the midst of regular text [1]

Table I is included merely to show the general styling for tables.

TABLF I Relative counting rate per atom for each radiator *

Radiator material	Thickness (g/cm²)	Thickness (Radiation lengths)	$f(T)$	N (10^{24} atoms)	R_{3-4}/N	R_{2-5}/N	Statistical standard error (%)
Li	0 2061	0 00181	0 969	0 590	0 194	0 181	1 4
C	0 1138	0 00220	0 967	0 1883	0 703	0 620	1 7
C	0 1937	0 00374	0 947	0 3206	0 644	0 591	1 9
C	0 3462	0 00669	0 882	0 5731	0 548	0 567	2 1
C	0 5902	0 01141	0 781	0 9768	0 371	0 442	2 0
Al	0 1099	0 00419	0 940	0 0810	2 95	2 68	1.8
Al	0 2897	0 01104	0 787	0 2135	2 26	2 24	1 5
Al	0 4729	0 01803	0 673	0 3485	1 71	1.94	1.5
Cu	0 0489	0 00369	0 947	0 01528	14 29	12 54	2 0
Cu	0.1383	0 01044	0 800	0 04326	12 08	11 16	1 8
Sn	0 0368	0 00423	0 939	0 00617	38 8	34 5	1.7
Sn	0 0962	0 01106	0 787	0 01610	34 0	31 2	1.9
Pb	0 0315	0 00534	0 917	0 003023	95 3	84 4	1.7
Pb	0 0599	0 01015	0 807	0 005747	83 0	75.7	2.1
Pb	0 1233	0 02090	0 637	0 01183	64 6	62 1	2 0
Pb	0.1861	0 03154	0 532	0 01785	55 5	55.3	

* N is the total number of atoms in the radiator
R_{3-4} and R_{2-5} are ratios, corrected for background, of the spectrometer counting rate when the listed radiator is in position, to the counting rate with the "standard" Pb radiator (0 1861 g/cm²)
R_{3-4} is this ratio measured by channels 3 and 4 of the spectrometer, corresponding to the narrow resolution function 2a.
R_{2-5} is this ratio obtained from channels 2, 3, 4, and 5 of the spectrometer, corresponding to the wide resolution function 2b

[1] Footnotes are set in eight on eight-point instead of eight on nine-point. Note the difference in spacing between these lines and between small type lines above.

The balance of the material on this page is merely lifted from published material to show various kinds and samples of equations. There is no logic or sequence of thought in the various paragraphs following.

$$\begin{pmatrix} f \\ g \end{pmatrix} \tag{2.2}$$

$$\epsilon=\begin{pmatrix} 0, & -i \\ i, & 0 \end{pmatrix}, \quad k=k\begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix},$$

$$\beta=\begin{pmatrix} 1 & 0 \\ 0 & -1 \end{pmatrix}, \quad \cdots, \tag{2.3}$$

where k is used interchangeably for the operator and its eigenvalue It follows directly from the above form for ϵ that

$$\langle(\mathbf{pr})(\alpha\mathbf{r})r^{-3}+r^{-3}(\alpha\mathbf{r})(\mathbf{rp})\rangle=2h\int_0^\infty (gf'-fg')r\,dr. \tag{2.4}$$

The normalization is here such that

$$\int_0^\infty (g^2+f^2)r^2dr=1.$$

Also it follows from the wave equation that

$$\langle(\mathbf{p}\alpha)r^{-1}+r^{-1}(\alpha\mathbf{p})\rangle=-2\langle p_0+\beta mc\rangle, \tag{2.5}$$

and hence again, by means of Eq. (2.3) as well as Eq. (2.4),

$$\theta(q)dq=\frac{N(q)dq}{1+(b/\sqrt{p})\exp(-q/2RT)}, \tag{19}$$

where q is the energy difference between two atoms X in the adsorbed state and a free molecule X_2 in the gas phase, θ is the proportion of the surface covered with atoms, and b is a constant. Equation (2) then becomes

$$\theta(p)=\int_{-\infty}^{+\infty}\frac{N(q)dq}{1+(b/\sqrt{p})\exp(-q/2RT)}. \tag{20}$$

If we now replace $(b/\sqrt{p})$ by y, and $\exp q/2RT$ by x, we find

$$\theta(b^2/y^2)=2RT\int_0^\infty \frac{N(2RT\log x)}{x+y}dy. \tag{21}$$

From STYLE MANUAL (*New York: American Institute of Physics, 1951*), *p. 7.*

Fig. 19.2. Example of technical journal page

FORM OF REPORT

The form in which the scientific paper presents the results of a study varies somewhat according to the association or journal to which it is submitted. All reports, however, include the same basic information. Figure 19.1 suggests a pattern for the organization of a scientific paper; Figure 19.2 shows how a scientific paper may look in print in a professional journal.

In submitting a scientific paper, the writer usually includes a number of illustrations: photographs, graphs, charts, diagrams, sketches, and line drawings. These are introduced in the manuscript at the points indicated by the context or are submitted as attachment at the end according to the custom of a particular society. In either case each item is numbered, its place in the text being clearly indicated. Likewise the titles, legends, or captions which describe the content of the illustration must each be written on a separate sheet of paper with reference numbers to the appropriate illustration and its location in the text. The captions for illustrations should be separated from the general text because they must be set by the printer as a separate operation.

PROFESSIONAL REVIEW OF SCIENTIFIC PAPERS

Scientific papers receive searching criticism and review from colleagues who are experts in the field in which the paper has been written. The diagram presented as Figure 19.3 shows the course which a paper submitted to the American Society of Mechanical Engineering travels on its way toward publication.

ORAL PRESENTATION OF SCIENTIFIC PAPERS

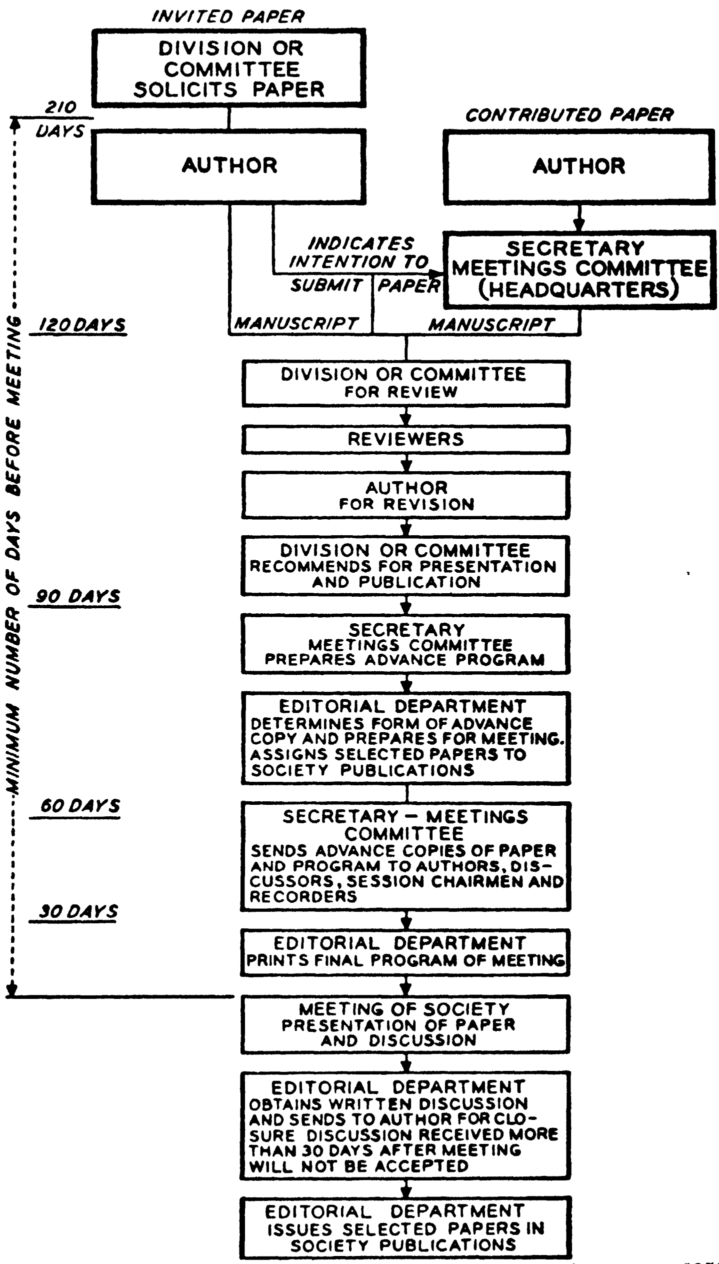
The paper orally presented at a scientific meeting is one of the chief means of technical communication. The American Chemical Society observes that papers should be worthy of their audience and a credit to their authors. Poor preparation and poor slides may convey the impression that the work being reported is also poor. The society offers this suggestion: "Give your paper the advantage of forceful presentation and effective slides."

FORCEFUL PRESENTATION

By "forceful presentation" the American Chemical Society means the presentation, in ten or twenty minutes, of work which may have taken months or years to perform. The speaker decides whether his audience is especially interested in the proof or the results. He plans his emphasis accordingly, remembering the old but always valid rules:

1. Tell your audience exactly what you *are going* to tell them.

2. Then tell it to them as you have promised.
3. Finally, tell them exactly what you *have told* them.



From AN A.S.M.E. PAPER *(New York. The American Society of Mechanical Engineers, 1956), p. 11.*

Fig. 19.3. From author to publication

This means that the scientific reporter should give his audience a brief introduction stating the nature, purpose, and scope of work. The work done and the results obtained are then reported, probably illustrated with curves and tables of selected data. Finally, he summarizes and tells the significance of his work.

DELIVERY

In the past there has been severe and caustic criticism about the delivery of technical papers before scientific meetings. To improve delivery, the American Chemical Society suggests a conversational approach as the most agreeable style of presentation. It warns however that "to carry it off" the speaker must know what he is going to say and that he can say it in the allotted time. One advantage of this method is that the speaker usually has to think what he is going to say next; hence, his rate of delivery is slow enough to permit the audience to follow. The speaker should use brief notes prepared on small, numbered cards.

From its extensive experience the American Chemical Society formulates some general rules. Here they are:

1. Refrain from reading a manuscript or reciting a memorized speech.
2. If you must read a paper, prepare a special draft and *read it well and slowly.*
3. Most of us grossly overestimate our ability to speak and to read.
4. Oral practice is highly recommended.
5. Use short sentences.
6. Hold up your head, open your mouth; enunciate clearly.
7. Don't drape yourself over the rostrum. Stand erect.
8. Don't let your voice trail off at the end of a sentence. The beginning and end of each sentence are important.
9. Vary the pitch and emphasis in your voice within its normal range, but don't "make a speech," or you will sound insincere.
10. Don't wave the pointer around aimlessly. Pick it up when you use it. Set it down when you are finished.
11. Vary any expressions which have to repeated. "May I have the next slide, please!" becomes monotonous after eight or ten times.
12. Keep your own interest in what you are saying and you will keep your listeners' attention.

PUBLIC ADDRESS SYSTEMS

Most technical meetings are held in rooms large enough to require the use of a public address system. Here also the American Chemical Society has some suggestions to aid effective presentation. The society says:

1. Notice the speaker who precedes you. See how far he stands from the microphone. Note how loud he appears to be talking.
2. When your turn comes, check yourself closely by listening to the first few sentences.

3. Observe the audience in the rear of the room to determine if they are listening or are struggling to hear.
4. If there is only one fixed microphone, and you must gesture a point to the screen, *stay at the microphone.* Even a lapel microphone will not pick up your voice if you suddenly turn your head away. All the audience will hear will be the scratching of the cord on your shirt.[1]

USE OF CHALKBOARDS

In general, the use of chalkboards at technical meetings should be held to a minimum. When a board is used, the reporter should write heavily, with large letters. He should stand to one side of the board, so that the audience can see what he has written.

TIMING

Societies set a time limit for the presentation of each paper. The reporter needs to make sure that he stays within his allotment. To do so, he needs to practice the actual delivery of his paper in advance and to time it carefully.

LANTERN SLIDES

An oral technical report is usually more effective if it is accompanied by lantern slides. These slides have one purpose: to clarify the presentation of an idea. Since people can take in and comprehend only a little at one time, it is better to show five simple slides for one minute each than one complex chart for five minutes. Each slide should be limited to one idea. Words, lines, formulas, and figures not essential to the understanding of that one idea should be ruthlessly eliminated.

Summarizing its recommendation to reporters at technical meetings, the American Chemical Society says:

1. that the form of a paper to be presented orally is not the same as that used for publication in a scientific journal
2. that a paper should never be "read" if it is possible to avoid doing so
3. that delivery should be slow and distinct
4. that the voice should be directed into the microphone
5. that a talk should be carefully timed
6. that the reporter should stay within the time limit allotted
7. that a talk should be practical.

To make communication easier, the society suggests lantern slides. It points out

1. that each slide should confine its message to one idea
2. that not more than 15 or 20 words should be put on each slide
3. that no more than 25 to 30 data should be included

[1] *Hints to Authors* (Washington: American Chemical Society), pp. 27-28.

4. that only data which will be discussed should be presented
5. that two simple slides are preferable to one complicated presentation
6. that on 8″ x 10″ copy, letters must be *at least* one-eighth inch high, one-quarter inch being better for use in a large room
7. that a graph is better than a table
8. that color enhances effectiveness
9. that a thumb spot on each side of the slide plus a serial number will assist the lantern operation
10. that a name and address on the box will speed the return of the slides to their owner[2]

READINGS

An A.S.M.E. Paper. New York: American Society of Mechanical Engineers, 1956.

Hints to Authors (Bulletin 8). Washington: American Chemical Society, 1939.

PARKER, WILLIAM R., *Style Sheet.* New York: Modern Language Association, 1951.

Style Manual. New York: American Institute of Physics, 1951.

TRELEASE, SAM F., *The Scientific Paper.* Baltimore: Williams & Wilkins Company, 1947.

TRY YOUR HAND AT THESE •

- **to evaluate the importance of the publication of scientific papers**
- **to provide training in the oral presentation of the scientific paper within prescribed time limits**
- **to review suggestions for the use of slides in presentation**

1. You are given fifteen minutes on a program of a scientific society to present a report on work you have done. Bearing in mind the suggestions of the American Chemical Society as summarized in this chapter, prepare first the manuscript of your talk, then the outline, and then your conversational presentation *without manuscript.*

2. Schedule two oral presentations before the class. Then have other class members make oral critiques of the presentations on the basis of standards suggested on page 302.

3. Develop two slides which may be used in a presentation.

[2] *Ibid.*, p. 2.

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THE STAFF STUDY

THE TECHNIQUE OF THE STAFF STUDY HAS ENTERED BUSINESS AND INDUSTRY from the experience of the military. In brief, one-page form the staff study summarizes the specific answer to a specific problem and records the opinions of all responsible persons concerning the proposed solution. The problem treated in a staff study generally relates either to the feasibility of a given course of action or to the determination of a course of action necessary to meet the requirements of a given situation.

When an officer fully understands his staff study assignment, he outlines a plan of action and a schedule of work to give his efforts direction. He studies files. He compiles and analyzes data. He consults interested individuals, specialists, and agencies. He holds personal conferences with experts. As far as possible, he avoids telephone calls and correspondence. He seeks first-hand, face-to-face discussion and primary documentation. He thoroughly explores the ramifications of his problem. After he has

Issuing Office :
Place of issue :
Date :
File number :

SUBJECT:

1. PROBLEM: concise statement
2. ASSUMPTIONS: necessary for logical discussion of problems which cannot be accepted or considered as facts
3. FACTS BEARING ON THE PROBLEM: essential facts stated in logical sequence
4. DISCUSSION: careful analysis of essential facts, inventory of pros and cons, logical deductions
5. CONCLUSIONS: statement of results of inquiry based on reasoned judgment of effects and implications of essential facts, any alternate lines of action being excluded from report
6. ACTION RECOMMENDED: concise, unambiguous statement of proposed action permitting simple approval or disapproval

Signature Initiating officer

ANNEXES: number and list annexes accompanying study, including implementing directives

CONCURRENCES: have officers concerned indicate concurrences by initials followed by name, rank, official position title, and telephone number

NONCONCURRENCES: have staff officers indicate nonconcurrence by initials followed by name, rank, official position title, telephone, and brief reasons for nonconcurrence stated on separate memorandums attached as additional annexes

CONSIDERATION OF NONCONCURRENCES: attach initialed statement of staff study author showing result of his consideration of nonconcurrences with reasons why, if any, nonconcurrences cannot be supported

ANNEXES ADDED: list annexes containing nonconcurrences attached

ACTION BY APPROVING AUTHORITY:

Approved (including) exceptions
Disapproved (excluding)

Signature of Executive

Fig. 20.1. Staff study form

gathered all the necessary information and studied the various points of view, he sits down with his pad and pencil. He thinks through the facts which he has collected. He analyzes various alternative solutions. He weeds out irrelevancies. He brings to focus the points which have critical significance. He inventories all possible answers to find the one best solution to the problem, listing for his own guidance the advantages and

disadvantages of each. By this process of exploration and evaluation, the officer arrives at a clear, reliable, fact-supported conclusion.

His next task is to convert this conclusion into a recommendation. The validity of this recommendation is the real test of the competence of the reporting officer. The recommendation must chart a clear course of action for the executive to follow. When the recommendation requires implementation, the officer drafts the implementing documents and attaches them to the staff study report.

Experience shows that a plan of action has quality and commands support when it includes the thinking of the persons most concerned with the best solution to the problem. Persons concerned want to feel that they have been consulted and given opportunity to contribute their thought and experience. When he has completed a careful draft of his report therefore, the officer circulates it for comment. By requiring the initials of each person who has reviewed the document, he can assure the executive that the study represents the view of the responsible persons concerned. This procedure expedites action, avoids friction, and encourages thorough exploration by a full and frank exchange of ideas. Persons who disagree with the proposal have opportunity to express their opinions by attaching them to the report as a part of the study. In the military, officers indicate (1) their concurrence, (2) nonconcurrence, or (3) no interest.

When his study is edited and revised, the officer submits it to the executive with annexes and implementing documents. The basic report, however, must always be reduced to a single-page statement as indicated in the outline form shown in Figure 20.1.

The staff study stands as one of the most useful kinds of reports designed to deal with a specific problem in terms of clear-cut action.

READING

CURTIS, LT. COL. HOMER K., "Preparation of a Staff Study," *Military Review*, December 1951, pp. 55-62.

TRY YOUR HAND AT THESE •

- **to become acquainted with the nature and value of a staff study**
- **to observe the process of research, exploration, and coordination by which the study is developed**
- **to gain practical experience in research**

1. Your group has been thinking about the use that it can make of its career reports. One proposal is to sponsor a Career Day. This suggestion raises

various problems of policy and calendar coordination. Prepare a staff study, working out the plan for such a Career Day.

2. A proposal is made that your group offer a "Man Marketing Clinic." The problem is referred to you for study. First read pages 291-315 in *Pick Your Job and Land It!* by Sidney and Mary Edlund. Explore the subject. Then develop a staff study report with necessary documents.
3. A report has been made to the dean that parking regulations on the campus are not satisfactory. The dean refers the problem to you for the development of a staff study. Make the study and prepare the report.

21

PUBLIC INFORMATION

PUBLIC UNDERSTANDING AND PUBLIC CONFIDENCE STAND AS MAJOR ASSETS of industry. Management therefore faces the problem of continuous communication through all media to explain its products, its program, and itself to the public world. This chapter discusses three kinds of report operations used to reach masses of people: (1) the news story, (2) the fact book, and (3) the annual report.

NEWS REPORT

The primary means for the distribution of information is the straight news story published in a newspaper or broadcast by radio and television. The importance of having company employees understand how to handle news is increasingly emphasized by industry. The New York Central Railroad Company publishes a booklet entitled *How to Meet the Press.* It

distributes this manual among its personnel down to the level of divisional and local officials.

The Quaker Oats Company issues a policy booklet called *Quaker and the Press*. "The day-to-day stories about us in your local newspaper and on the air," it begins, "publicly measure Quaker's success at being a good business citizen . . . and a worthwhile part of your community." Defining "news" as "first-time information about anything interesting," the policy manual urges Quaker personnel to "get acquainted and keep acquainted with . . . key newspaper and radio people, particularly those who cover business, labor, and farm news." The Company proceeds to tell its employees which staff persons in newspapers and broadcasting offices they should know. Here is the schedule:

NEWSPAPERS

1. *The reporter*—who gets the news and reports it truthfully
2. *The business editor*—who works with Quaker on stories of industrial importance
3. *The farm editor*—who is interested in such Quaker projects as grain betterment program and the white corn program
4. *The picture editor*—who under the city editor is responsible for photographs
5. *The city editor*—who gets news releases and assigns reporters and photographers
6. *The managing editor*—who is in charge of general news and the reportorial setup of the paper
7. *The editor*—who carries out the policies of the paper
8. *The publisher*—who sets the policies of the paper.

RADIO AND TELEVISION STATIONS

1. *The news writer*—who corresponds to the reporter on the newspaper
2. *The news editor*—who corresponds to the newspaper city editor
3. *The special events director*—who directs special broadcasts, frequently of a public service nature.

The advantage accorded a skillfully prepared news release is illustrated in the experience of a General Motors engineer who traveled to Florida to deliver a technical paper on "paint fading" before the American Chemical Society. Normally the paper would have been considered of little importance and would never have come to public attention. Its purpose was to offer proof that automobile finishes do not fade because of sunlight alone, as was supposed, but because of dew. The engineer was asked to prepare a 400-word story to be given to reporters. The story was picked up by the news services and appeared on the front page in hundreds of newspapers.

WRITING NEWSPAPER RELEASES

A newspaper release is a story written by the organization itself and distributed to newspapers and broadcasting stations for publication at a specified time. Every day, organizations prepare and distribute these news reports about their own activities. In the entrance lobby of the National Press Club in Washington, racks are filled all day long with typewritten, mimeographed, and sometimes printed material telling what

STRUCTURE OF A NEWS RELEASE

Responsible Organization	Office of Press Information THE ANONYMOUS CORPORATION
Address	6000 Boulevard Avenue Central City, New State
Number and person to call for further information	*Telephone:* AMazon 3-6111 Jacob Newswriter
Release date	For release Morning newspapers Tuesday, October 5, 19xx
Short description of content	ANONYMOUS ANNOUNCES FAMILY FARE PLAN
Lead of story answers questions 1. WHO? 2. WHEN? 3. HOW? 4. WHERE? 5. WHY?	Main facts in first paragraph. xxxxxxxxxxxx xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
	Details in succeeding paragraphs in descending order of importance.

Fig. 21.1

all kinds of organizations and people within those organizations are doing, thinking, and saying.

While the heading of news report releases may vary in arrangement and wording, each release contains the same basic information suggested in Figure 21.1 as a pattern for a news report release. It begins by stating the name and address of the responsible organization which is issuing the information. This is followed by the name and telephone number of the person in that organization who should be called upon for further facts or explanation. Next it specifies on what date and at what time the information is to be released. Compliance with a specified release date is one of the inviolable ethics of the press. By the submission of a news story well in advance of its release date, a writer can give a paper time to work the item up and use it without the pressure of deadline restrictions which come with news hot from the wires.

In addition to the straight news report, publications make extensive use of feature reports. These are special and timely news stories which have no momentary urgency. They can be used at almost any time when the newspaper has space. Feature stories are thus "good filler." Built around unique facts of general interest, they deal with human interests which have perennial appeal. The strength of a human interest report is the freshness and originality used in the idea which it develops. It is the description of the extraordinary in the midst of the commonplace that gives the feature story its appeal.

FACT BOOK

The second type of public information report is the fact book. This kind of brochure gives reliable information which describes what an industry or organization is and does. Fact books divide into three classifications based on the functions which are to be performed. These three classifications are:

1. fact books for reference use
2. fact books to tell the story of an industry in plain, engaging, anecdotal style
3. fact books to call attention to what is believed to be unfair treatment.

REFERENCE DATA BOOK

The fact book prepared for reference use brings together and organizes information about an industry. This kind of brochure is characterized by

logical organization and accessibility of the data through a table of contents and a carefully prepared index. Sometimes it presents the material as answers to a series of questions which readers may be expected to have in mind.

Examples of such "fact encyclopedias" are those published by the insurance industry, by the petroleum industry, and by trade associations. A fact book places up-to-date information at the finger tips of alert people for convenient reference. The theory behind such a compilation is that the circulation of reliable information is necessary and beneficial. For that reason, it ought to be supplied to the public by the organizations, about themselves, and from their own records.

INDUSTRY STORYBOOK

The industry storybook describes in easy-to-read fashion how an organization came into being, what it is, what it does, and what it stands for. One of the most concise industry stories is told in an inscription on the modernistic Lever Building located at 390 Park Avenue, New York. The inscription reads:

> *The mission of our Company as William Hesbeth Lever saw it is to make cleanliness commonplace, to lessen work for women, to foster health and contribute to personal attractiveness that life may be more enjoyable and rewarding for the people who use our products.*

The Story of the Canning Industry begins with this statement:

> The development of the canning industry—the story of its early failures and successes, its problems, its growth, and its present-day importance among food industries—can be properly understood only in the light of the scientific principle upon which canning is based.

The basic principle of canning is that the food is sterilized by heat in air-tight containers.

Hilton Hotels place at the bedside reading table in every room a copy of the "Conrad Hilton Story" entitled *The Silver Spade.* Dun & Bradstreet distributes *The Mercantile Agency; The Story of Impartial Credit Reporting.* The Bell Telephone publishes a vividly illustrated biography, *Alexander Graham Bell.* United Air Lines distributes a 36-page brochure called *Flight Plan.* It tells the story of "teamwork in action" and leaves the passenger with a feeling of assurance and safety. Merrill Lynch, Pierce, Fenner & Beane explain the stock market and the firm's services in a series of valuable information brochures issued under such titles as *How to Invest* and *How to Read a Financial Statement.*

The American Society of Composers, Authors, and Publishers tells

the ASCAP story in a 5" x 6" brochure of 28 pages designed with modernistic dignity. It begins by describing how ASCAP works.

The *American Society of Composers, Authors, and Publishers* is a democratic, non-profit association of men and women who create and publish the music that is a vital part of our Nation's living culture.

The license fees which the Society collects for the public performance for profit of its members' works are distributed quarterly among these members. Thus composers and authors are afforded a measure of economic security, and are provided an incentive to add new works to the varied and growing repertory of musical Americana.

The Society also grants free licenses for non-profit performances of the compositions of its members for charitable, religious, patriotic, and public purposes.

ASCAP is proud of its more than thirty-five years' service to its members, its clients, and the public good.

The booklet ends with a statement of the ASCAP credo.

The Standard Oil Company of California publishes a fact booklet entitled *Oil in the Next Century.* It points out that America has come a long way up from drudgery since 1900 and that the per capita use of energy has increased more than 100 per cent in a half century, largely because of the use of petroleum. The story goes on to tell, Jules Verne fashion, how the oil industry has made foreign friends to meet increased demand and how it works toward the anticipated demand of 1975.

FACT STATEMENTS ISSUED TO CREATE "PRESSURE"

The third kind of fact book presents information to explain "grievance." The purpose of stating the facts is to create a "pressure" from public opinion to remove the alleged injustice. The "pressure statement" always takes the form of a "position brief" or a "case brief." The New York Telephone Company, for example, wants its customers to know that the telephone bill includes a big chunk for taxes. The company does not complain about the taxes—it just tells customers how much of their bill goes to the government. The company then proceeds to compare the telephone directories in Moscow and New York. The first Moscow directory to be issued after World War II had 75,000 listings for a city of 5,000,000 inhabitants. The entire printing was sold out in a few hours at a price of 18 rubles or $4.50. In contrast, New York City, with a population of 8,000,000, has a directory with 3,000,000 listings and an annual circulation of over 7,000,000 directories delivered free to all subscribers. This "fact" story was told in a little leaflet called *Talking It Over.* It was mailed to customers with their monthly bills. Its purpose was to show how much service is performed for the monthly telephone charge. Even with high taxes customers get a lot for their money!

ANNUAL REPORTS

Probably the most important type of public information issued by any organization is its annual report. As industry has expanded to huge proportions, its operations have acquired almost semi-public status. In recognition of this fact industry has begun to address its annual reports to stockholders, employees, and the public, or just "To the Friends of General Foods."

The interest in better annual reports developed slowly. In the 1930s a man by the name of Jim Taylor, as secretary of the Vermont Chamber of Commerce, became a missionary for "reports that tell their story to the citizens." To him as a New Englander the annual "town report" was fully as important as the annual town meeting. It told the people about their neighborhood business. As he studied town reports, he found they were generally unattractive in physical appearance, dull and uninteresting in content, and not very informative. Jim kept hammering away at the idea that citizens ought to know about their business. Year by year, town after town began to compete for the best report. The Green Mountain people became excited about their own business! Taylor preached far and wide the gospel of better reports. People over the nation began to be stimulated by his concern for better reports.

In 1929 depression struck the American economy. The stock market crash stunned people and ruined business. Federal reforms placed new restrictions on financing. Accounting as a profession faced novel problems. The growing influence of labor unions led to demands that management "open the company books." The struggle with world communism compelled industry to rise in the defense of a "free man's way of life." World War II gave a push to make big business bigger, and "big business" has a connotation historically not to the fancy of the average man. Opinion polls began to dig up the facts about the people's enormous ignorance of the American economic system. Research studies pointed to misconceptions in the minds of labor about management and in the minds of management about labor.

A third factor influencing the development of annual reports was the attitude of a few far-sighted executives who about 1900 began to abolish "secrecy" from the management of industry. They started to publish facts about their operations. Following World War I a broader conception of public relations began to develop as popular studies showed that the modern corporation system tends to divorce ownership from management and control.

All of these factors combined to confront industry with the problem of improving public information reports. In 1939 the Mead Corporation published a *Study on Annual Reports*. In 1946 the American Management

Association prepared a report on the *Preparation of Company Annual Reports*. The following year it produced a booklet on *Reporting to Employees and Public on Profits and Productivity*. The American Institute of Accountants started an *Annual Study of Annual Reports*.

The net result of all these circumstances has been to show (1) that big business is an interrelated pattern of human relationships; (2) that the productivity of these relationships depends upon the flow of accurate information to create understanding; (3) that the annual report is one way of supplying that information.

As employees and union pressures became stronger, corporations began to publish a report for stockholders and another for employees. This separation has proved unsatisfactory. The trend is to publish one report for all the groups concerned with the activities of a company.

As the annual report was studied further, it became clear that its potential readers comprised a number of different "publics." Are stockholders interested in the same kind of information that appeals to the employees? Do bankers want to read the facts which the employees want to see? How about the dealers, the suppliers, the plant community, and the general public? The answer to the question of what content appeals to these different publics has now been pretty well answered. The solution is not found in a series of special reports for the different audiences but in one report edited for the general audience.

This solution of the problem of the interests of the various publics means that annual reports have to be planned carefully in advance by a competent editorial committee. This committee needs to see to it that the report contains the information which all the groups have reason to expect. Opinion studies show that the general audience wants real content; enamel paper, breath-taking visuals, and make-up ingenuity, however impressive and desirable, are no substitute for the facts. Readers, it seems, care little about pictures of the corporation president or of the officers and directors. They do not care too much about pie charts breaking down the sales dollar or about simplified balance sheets. Stockholders want to dig deep.

APPOINTMENT OF AN EDITORIAL COMMITTEE

The construction of a good annual report depends upon the efforts of a committee working against a time schedule. A calendar of operations, such as the one suggested in Figure 21.2 provides a plan for the preparation of an annual report for a corporation with a fiscal year ending on June 30. Toward the end of November the company sets up an editorial committee. Such a group includes one or two top officers, a public relations man, and representatives from the finance department. Experience shows that a five-man committee works well. Once the policy committee has been set up, the working group should include

1. a chairman-coordinator who keeps the schedule moving
2. a writer to combine all contributions and make the text uniform in style
3. an artist
4. a photographer
5. the printer

Such a committee, with top company officers, blocks out the pattern of the report, breaks the plan down into topics, estimates the space to be allocated to each topic, and assigns the various topics to the proper persons to develop. At this preliminary stage the committee prepares a dummy with full editorial and production specifications. The various writers are next asked to submit outlines covering their assignments. Detailed discussion takes place with the finance officers and the firm of certified public

TIME SCHEDULE FOR PREPARATION OF ANNUAL REPORT

	Month		Operation Number			Description
Step 1	5	NOVEMBER	xxxxxxx	*1*	xxxxxxx	Selection of report committee; planning of topics and dummy, assignments
	6	DECEMBER				work period
Step 2	7	JANUARY	xxxxxxx	*2*	xxxxxxx	Circulation of dummy and text for criticism
Step 3	8	FEBRUARY	xxxxxxx	*3*	xxxxxxx	Revision of dummy and circulation for approval
Step 4	9	MARCH	xxxxxxx	*4*	xxxxxxx	Submission of copy to printer (other than annual audit)
	10	APRIL				
	11	MAY				
	12	JUNE				
	1	JULY				
Step 5	2	AUGUST	xxxxxxx	5	xxxxxxx	Submission of copy based on annual audit
Step 6	3	SEPTEMBER	xxxxxxx	*6*	xxxxxxx	Annual Report issued
	4	OCTOBER				

Fig. 21.2

accountants which conducts the annual outside audit. Accountants now give increasing professional attention to the presentation of statements in the annual reports.

Early in January a dummy and a first draft of the text are ready for circulation to top officers for review and criticism. In early February a revised draft is ready for circulation and approval. By middle March the copy, except for the detail needed from the annual audit, is sent to the printer.

As soon as the audit details are available after the close of the fiscal year on June 30, the last pages of the copy are turned in. The report should be ready for distribution soon after Labor Day in September. The Sun Oil Company has even taken the trouble to tell its public exactly how it goes about producing the annual report.[1] It says:

> Sun Oil Company each year publishes a full, factual report on the activities and achievements during the preceding year, in a comprehensive annual report, examined by a firm of public accountants.
>
> Preparation of Sun's annual report is a time of intensive fact-gathering, evaluation, and personal involvement by officers, department heads, and other Sun executives. Every officer of the Company shares responsibility for accounting for the stewardship of management in the conduct of Sun's affairs. More than a score of people, from the Chairman of the Board through all levels of personnel, devote time over a four-month period to the preparation of the annual report each year. Altogether, hundreds of man-hours are involved.

Under the coordinating leadership of a representative from the public relations staff the preparation of the report begins in the fall; it is mailed to stockholders, employees, and other interested groups toward the end of March.

INFORMATION READERS WANT

In editorial content, the annual report should give the reader the information he wants. A few companies actually conduct reading tests among stockholders, employees, and the public to see how far the editors have succeeded in their appeal and presentation. Extensive studies have identified the characteristics of a good annual report; these are summarized in Figure 21.3. A form for presenting statistical highlights of the year is suggested in Figure 21.4. This schedule is based chiefly on suggestions of John L. Carey, managing editor of the *Journal of Accountancy* and is designed to give employees, as well as stockholders, information which studies show they want.

EASY-TO-READ TEXT

Despite the emphasis placed on good reports, a recent study shows that reports fall far short of the ideal. Sirvon Pashalian and William T. E. Crissy studied the annual reports of the corporations in the so-called "Billion Dollar Club," that is, companies with assets over a billion dollars. They found that (1) the report language was beyond the comprehension of three-fourths of the adult population, (2) the reports were low in human interest value, and (3) out of 21,000 words sampled, only 20 names were mentioned and these names were concentrated in a few reports.

[1] "Birth of an Annual Report," *Our Sun*, Spring 1956, pp. 24-29. Quotation from pp. 24-25.

A GOOD ANNUAL REPORT

1. is approximately the size of *Time* magazine, with 16 to 42 pages, printed on *white* paper 8½″ x 11″
2. is easy to read
3. arranges material so that ideas can be quickly grasped
4. clearly separates technical from nontechnical discussions
5. is objective in presentation
6. is free of ballyhoo
7. is uncolored by emotional bias
8. describes the industry
9. makes clear statements of the benefits produced by the corporation for society as a whole
10. is accurate and bona fide
11. gives a thumbnail statistical summary highlighting the operations of the year
12. shows the number and locations of plants, offices, and other facilities
13. describes and visualizes the company's products and the steps and processes in their manufacture and distribution
14. shows the end uses of the products in human terms
15. tells the company's interested publics specifically what they want to know as follows:

Stockholders	*Employees*	*Financial Institutions*
Earnings and dividends	How people benefit from the operation	Earnings and dividends
Dividend policy	Payments to employees, including management	Dividend policy
Reinvestment of earnings	Outlook	Reinvestment of earnings
Outlook for coming year		Outlook
Expected profit possibilities		Expected profit possibilities
Product and market development		Product and market development
Financial record over period of years		Management
		Financial record over period of years

16. shows clearly the financial position of the company as certified by the outside auditors

Fig. 21.3

HIGHLIGHTS OF THE YEAR

Dollars received from sale of product	$______	
Dollars spent—impersonal costs (other than payments to people for work done)	$______	
Balance	______	
Less interest	______	
Less taxes	______	
Payments to employees	$______	plus welfare benefits in the amount of

Classified by groups such as

		(number in group)	(Average payment per individual)
Plant workers	$______	"	"
Office workers	$______	"	"
Sales personnel	$______	"	"
Research staff	$______	"	"
Executive management	$______	"	"

Dividends	$______
Per cent return on investment	______%
Number of shares outstanding	______
Number of stockholders	______
Average share holdings	______
Distribution of stock holders	
Shares held by individuals	______
Held inside the company	______
Average holdings	______
Held outside the business	______
Average holdings	______
Shares held by institutions	______
Average holdings	______
Shares held by men	______
Shares held by women	______
Geographical distribution of stockholders	______
Amount of earnings reinvested in the business	______
Market data:	
High:	
Low:	
Average:	
Changes in yield during fiscal year	______
Number of shares traded on selected dates	______

Fig. 21.4. Thumbnail statistical highlights

DISTRIBUTION OF THE REPORT

The distribution of the annual report to the proper persons is an operation which takes planning. Among those who should receive the report are:

bankers
boards of trade
chambers of commerce
clergymen and community leaders
creditors
customers (important users)
dealers in company products
editors of business newspapers
editors of financial publications
editors of trade journals
editors of TV and radio news
employees
faculty members of educational institutions, if they are interested
government officials (local, state, and federal)
requesting public
stock exchangers
stockholders
suggested names submitted by company officers

STUDY OF ANNUAL REPORTS

There is only one way to keep abreast of the fast-moving development in the field of annual reports. That is to collect and study the best examples of reports. From each one an alert mind will find useful suggestions. A student of annual reports must also watch the results of opinion polls on people's interests and keep an eye out for articles in professional magazines. The production of an annual report has become a major task in the public information program of modern industry.

TRY YOUR HAND AT THESE •

- **to recognize the importance of public information**
- **to practice writing the news release**
- **to understand the nature of fact books**
- **to understand the structure and method of development of the annual report**

1. Write a memorandum proposing a program for informing the public about the Career Day scheduled by your group.
2. Write a newspaper release announcing Career Day and indicate the daily, student, high school, and other newspapers to which it is to be sent.

3. Prepare a one-page fact sheet describing a college or university.
4. For your cumulative notebook collect copies of a reference data book, an industry story, a pressure statement, and an annual report.
5. Draft a plan for an annual report of a college. To obtain the data, take a copy of the president's annual report. From information contained in it, prepare what you believe would be a model annual report for the institution.
6. Draft a plan for the editorial development and timing of an annual report for some industry with which you are familiar.
7. You are the public relations officer of The Northern Trust Company in Chicago. You are asked by the bank president to prepare releases and develop a public relations program designed to obtain the largest response to the "comprehensible" information report shown in Figure 16.1. Plan the program to reach as many publics as possible and write the necessary releases.

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22

ORGANIZATIONAL WRITING

ORGANIZATION IS THE PURPOSEFUL ASSOCIATION AND PRODUCTIVE COMbination of the specialized skills of human beings to achieve through common effort a clearly defined objective. "Take away all our factories, our trades, our avenues of transportation, our money, but leave me our organization," said Andrew Carnegie, "and in four years I will have reestablished myself." Organization exists in the flow of communication through the web of human relationships which constitute the enterprise. Organizational writing makes objectives and relationships clear. It releases human power in teamwork.

This chapter discusses five types of organizational writing: (1) definition of policies, (2) organizational chart, (3) job specifications, (4) standard practice procedures, and (5) the organizational manual and book of rules and regulations.

ORGANIZATIONAL POLICIES

A policy states a reliable principle of organizational action. Pigors says that an organizational policy must

1. state corporate purpose for the guidance of all representatives to whom authority has been delegated to act in a given area
2. refer to a principle of behavior
3. commit the top organizational level and all subordinate representatives to conform to this principle in practice
4. leave room for discretion by the representatives who apply it in a variety of situations and over a period of time. A policy should be written, carefully explained to all who will be affected by it, and be subject to discussion at every organizational level.[1]

Safeway Stores issues a brochure entitled *Policies*. In transmitting the booklet the company president makes this opening statement:

WHAT IS COMPANY POLICY ON THIS?

SAFEWAY EXECUTIVES AND EMPLOYEES:

Many times, before making a decision, you have asked yourself, "What is Company policy on this?" Few days pass that do not require accurate knowledge and application of Safeway business policies. . . .

Here are some representative Safeway policy statements:

CIVIC COOPERATION

Civic endeavor encouraged

Employees are encouraged to take active parts in civic affairs, no matter what the size of their community. They are urged, through the medium of the employee publication, and in various guides and manuals at their disposal, to exercise their privileges as citizens—to vote at elections, to become a part of the community endeavor.

It is Company policy to participate in local chambers of commerce and in service clubs (Rotary, Lions, Kiwanis, etc.) when these latter organizations see fit to invite participation by our Company.

Dues and other expenses

As added inducement for employees to conform to the above, it is Company policy to pay full salaries to employees while serving on juries and to absorb the expenses incurred in memberships in civic organizations and service clubs.

Those employees representing the Company in such organizations should attend regularly and take an active part.

The Public Relations Manager is responsible for authorizing and approving all expenditures, initiation fees, dues, and other allowances. Employees who represent this Company shall not be put to any personal expense in connection with such memberships.

[1] Paul Pigors, *Effective Communication in Industry* (New York: National Association of Manufacturers, 1949), p. 30.

MONEY BACK GUARANTEE

Cheerful refunds

It is Company policy that *all sales* are made on a money back guarantee. This means that money shall be refunded cheerfully if for any reason a customer is dissatisfied with any purchase.

The importance of written-out policy statements can be appreciated by taking a look at some of the problems on which retail department stores must define their position. Here is a list of some representative problems on which the store must have clear policies:

I. Merchandise policies, specifying:
   1. Type of goods to be handled, such as drugs, groceries, apparel
   2. Number of lines and assortments within lines
   3. Standard of quality
   4. Standards of style and fashion
   5. Degree of exclusiveness to be achieved
   6. Buying practices and merchandise control

II. Price policy, covering:
   1. General level of prices to be charged by the store
   2. Practices with respect to discounts and mark-downs
   3. Number of prices in a given line

III. Promotional policy, setting forth:
   1. Emphasis to be placed on promotion
   2. Appeals to be used in attracting customers
   3. Media to be used in advertising

IV. Service policies, including:
   1. Personal services to be rendered in the store
   2. Credit
   3. Delivery
   4. Returns and adjustments
   5. Telephone and mail orders
   6. Alterations
   7. Parking

V. Personnel policies, specifying:
   1. Practices to be followed in selecting, training, and promoting employees
   2. Wage scales and methods of payment
   3. Hours and conditions of employment
   4. Practices with respect to vacations, purchase discounts, and maintenance of employee morale

VI. General business policies, including:
   1. Standards for relations with suppliers
   2. Financial practices
   3. Role of the store in community affairs

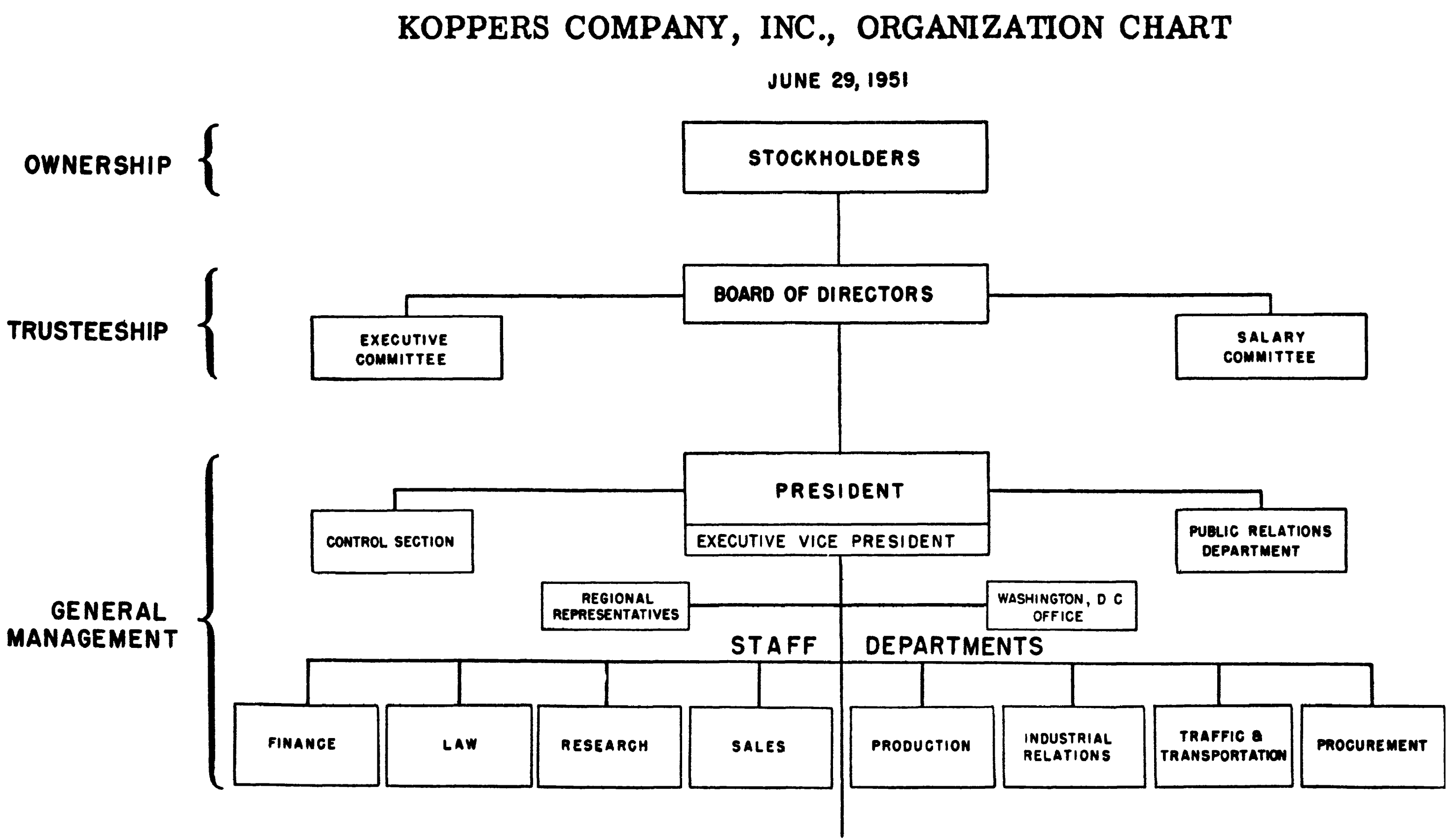
KOPPERS COMPANY, INC., ORGANIZATION CHART
JUNE 29, 1951
OWNERSHIP
TRUSTEESHIP
GENERAL MANAGEMENT
STOCKHOLDERS
BOARD OF DIRECTORS
EXECUTIVE COMMITTEE
SALARY COMMITTEE
PRESIDENT
EXECUTIVE VICE PRESIDENT
CONTROL SECTION
PUBLIC RELATIONS DEPARTMENT
REGIONAL REPRESENTATIVES
WASHINGTON, D C OFFICE
STAFF DEPARTMENTS
FINANCE
LAW
RESEARCH
SALES
PRODUCTION
INDUSTRIAL RELATIONS
TRAFFIC & TRANSPORTATION
PROCUREMENT

Fig. 22.1

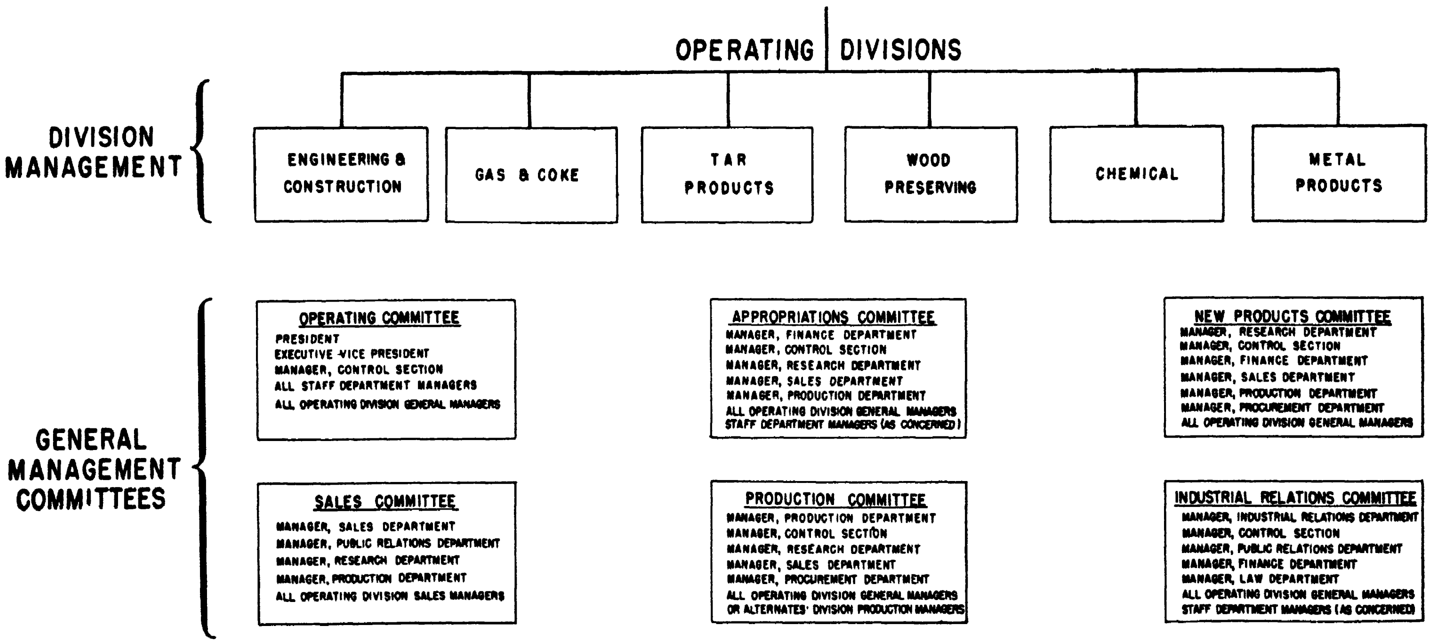
OPERATING DIVISIONS
DIVISION MANAGEMENT
ENGINEERING & CONSTRUCTION
GAS & COKE
TAR PRODUCTS
WOOD PRESERVING
CHEMICAL
METAL PRODUCTS
GENERAL MANAGEMENT COMMITTEES
OPERATING COMMITTEE
PRESIDENT
EXECUTIVE VICE PRESIDENT
MANAGER, CONTROL SECTION
ALL STAFF DEPARTMENT MANAGERS
ALL OPERATING DIVISION GENERAL MANAGERS
APPROPRIATIONS COMMITTEE
MANAGER, FINANCE DEPARTMENT
MANAGER, CONTROL SECTION
MANAGER, RESEARCH DEPARTMENT
MANAGER, SALES DEPARTMENT
MANAGER, PRODUCTION DEPARTMENT
ALL OPERATING DIVISION GENERAL MANAGERS
STAFF DEPARTMENT MANAGERS (AS CONCERNED)
NEW PRODUCTS COMMITTEE
MANAGER, RESEARCH DEPARTMENT
MANAGER, CONTROL SECTION
MANAGER, FINANCE DEPARTMENT
MANAGER, SALES DEPARTMENT
MANAGER, PRODUCTION DEPARTMENT
MANAGER, PROCUREMENT DEPARTMENT
ALL OPERATING DIVISION GENERAL MANAGERS
SALES COMMITTEE
MANAGER, SALES DEPARTMENT
MANAGER, PUBLIC RELATIONS DEPARTMENT
MANAGER, RESEARCH DEPARTMENT
MANAGER, PRODUCTION DEPARTMENT
ALL OPERATING DIVISION SALES MANAGERS
PRODUCTION COMMITTEE
MANAGER, PRODUCTION DEPARTMENT
MANAGER, CONTROL SECTION
MANAGER, RESEARCH DEPARTMENT
MANAGER, SALES DEPARTMENT
MANAGER, PROCUREMENT DEPARTMENT
ALL OPERATING DIVISION GENERAL MANAGERS
OR ALTERNATES' DIVISION PRODUCTION MANAGERS
INDUSTRIAL RELATIONS COMMITTEE
MANAGER, INDUSTRIAL RELATIONS DEPARTMENT
MANAGER, CONTROL SECTION
MANAGER, PUBLIC RELATIONS DEPARTMENT
MANAGER, FINANCE DEPARTMENT
MANAGER, LAW DEPARTMENT
ALL OPERATING DIVISION GENERAL MANAGERS
STAFF DEPARTMENT MANAGERS (AS CONCERNED)

Fig. 22.1. *(cont.)*

ORGANIZATIONAL CHART

An organizational chart visualizes the plan for dividing work among specialists and for coordinating the efforts of these specialists through clear lines of authority to achieve the purpose of the organization. It is a pictorial plan for teamwork. It tells a man where he fits into the organization

JOB SPECIFICATION

UNIT Industrial Relations Department

TITLE Personnel Administrator

JOB SPEC NO. 11-5
DATE ISSUED 3-31-49
DATE REVISED 6-29-51
PAGE NO. 1 OF 2

BASIC FUNCTION:

Administration of programs and procedures to provide and maintain adequate manpower within the company.

SCOPE:

The duties and responsibilities of this position involve personnel activities on a company-wide basis.

DUTIES AND RESPONSIBILITIES:

1. To develop and administer programs for recruiting, selecting, placing and discharging personnel.

2. To study the personnel problems of particular units of the company and assist them in adapting plans and procedures to their specific requirements.

3. To analyze, coordinate and render service on the various problems and procedures involved in administering employee benefit programs.

4. To conduct surveys and interpret survey results. To point out the necessity for corrective action or alteration of policy and procedure on the basis of survey findings.

5. To analyze and develop procedures for maintaining adequate personnel records.

6. To coordinate and render service on the various problems and procedures involved in reporting the current status of personnel activities.

7. To develop and coordinate methods for appraisal of the performance of employees in all ranks and units of the company.

8. To develop and coordinate methods for determination of the manpower status of units of the company and for reporting of the same.

METHOD OF MEASUREMENT:

General satisfaction of management with the manner in which these functions are administered, the ability to obtain compliance of other units with recommendations and procedures of the department, the manner in which management is kept advised of the status of these matters by reports, plus general cooperation with other units of the organization will be measurements of the performance of these duties and responsibilities.

Fig. 22.2. Industrial job specification

and what the organization of which he is a part looks like as an operating whole.

In building an organizational chart, the administrator should discuss the draft of his ideas with personnel in echelons both above and below the position being chartered as well as with the person immediately concerned. In the organizational chart of Koppers Company given in Figure 22.1 the functional structure emphasizes line and staff relationships. The basic organizational chart is then amplified by diagrams describing various departments in detail so that each employee can see at the point of his own job his working human relationships. Because organization, like life itself, is dynamic and constantly adjusting to needs, the organizational chart must be kept up-to-date. This means that changed programs, patterns of relationships, or reassignment of personnel should be recognized by a prompt redrawing of the diagram.

JOB SPECIFICATIONS

The job specification tells who does what in which pattern of responsibility. The format used to write job descriptions differs from company to company, but the form used to describe the work of the personnel administrator in Koppers Company, Inc., shown in Figure 22.2, represents a standard type. It divides the description into five parts. Under basic function the specification tells what part the personnel administrator plays in the operational activity of the whole company. Under "Scope" the sheet explains the area over which the officer operates. In the third section the specification describes exactly what activities the personnel administrator performs. In the section dealing with the method of measurement, the specification states the standards by which the company is going to judge how well the work is being performed. The final section (not shown) deals with organizational relationships. It shows to whom the officer reports, whether the job is a line or staff function, and how the position fits into the structure of the company.

To simplify the mechanics of chart-making, a writer can obtain from commercial suppliers adhesive rectangles of various shapes and sizes with rolls of adhesive lines to indicate the flow of authority. By means of a large plastic working board, he can arrange his rectangles, run the lines, and complete his design so that copies can be photostated or produced by offset directly from the working board. They can be reproduced by ditto, mimeograph, multilith, photostat, offset, or even letter press.

STANDARD PRACTICE PROCEDURE

The standard practice procedure describes how an operation is carried out. Each procedure deals with a single subject. It spells out the manner of performance.

The drafting of standard practice procedures becomes a continuing job of management. When the need for a procedure becomes apparent, the head of the division concerned submits a draft to the executive office. This draft defines the purpose of the operation. It describes the steps in se-

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THE ANONYMOUS CORPORATION

STANDARD PRACTICE PROCEDURE

Index 100.1		Procedure No. 96
Replaces procedure No.	dated ———————.	Effective No. 1, 19xx

SUBJECT: STORES REQUISITIONS

PURPOSE: Stores requisitions are used to withdraw materials and supplies from company stores and stock rooms as necessary to conduct the operations of the company.

ORIGIN: Stores requisitions are originated by company personnel authorized to charge materials or supplies to budgeted accounts.

FORM: The originator will prepare the "*Stores Requisition*" form entering the following data:

1. Delivery point
2. Date
3. Account or Project Order to be charged
4. Quantity wanted
5. Unit—dozen, gallons, reams, etc.
6. Item description

APPROVAL: Approval of the division or department head responsible for the budget account to be charged will normally be secured before the requisition is presented to the storekeeper. However, routine requisitions for such supplies as housekeeping materials will be filled by the storekeeper without formal approval if presented by personnel regularly performing duties needing such supplies. Such unapproved requisitions will be held for approval by the responsible supervisor at the Stores Office for a period of one week.

RECEIPT: The person accepting delivery of material from the storekeeper will sign in the "Received by" space and leave the requisition with the storekeeper.

COSTING: The storekeeper issuing the material will enter the unit cost and calculate the total item and order costs and will sign the requisition. A list of standard unit costs as approved by the business manager will be used for costing purposes.

BUSINESS OFFICE: "Stores Requisitions" will be completed and forwarded to the Business Office weekly by the storekeepers.

BUDGET CONTROL: The Budget Office will post the totals of the requisitions to Budgetary Control Accounts and will notify the responsible supervisors if the proportionate parts of their supply budgets are inadequate for the demands made upon them. The effect of the stores requisitions will be shown on the monthly budgetary reports as a part of the total expenditures.

DISTRIBUTION: Copies of this procedure are distributed to the president, business manager, treasurer, chief accountant, storekeepers, and department heads.

Fig. 22.3. Standard practice procedure

quence which are necessary to carry on the task. Samples of any forms which should be executed in the operational process are submitted with the draft of the procedure. The originator recommends the persons to whom the procedure should be distributed, so that all personnel concerned will be informed. The executive office submits the proposed procedure to a committee for review and to other personnel whose opinion may contribute to the improvement of the statement. The chief executive officer reviews and approves or rejects the proposed procedure. If the procedure is approved, he sets an effective date and passes the document to the secretary for classification in the proper section of the procedure manual. The procedure is then reproduced and distributed.

The standard practice procedure in Figure 22.3 describes the operations necessary to requisition supplies from the company stock rooms.

ORGANIZATIONAL MANUAL

The organizational manual brings together, in one handy cumulative working handbook, the policy statements, organizational diagrams, job descriptions, standard practice procedures, and other documents defining organizational structure, operating procedure, and personnel functions.

RULES AND REGULATIONS

Every organization develops rules and regulations which define the respective rights, privileges, and obligations of employer and employee. These statements develop over the years. They are restated to meet changing needs. They ought to be brought together and codified in one convenient handbook.

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TRY YOUR HAND AT THESE •

- **to examine the nature of organization and the part which communication plays in organizational effectiveness**
- **to understand the importance of clearly stated policies**
- **to become familiar with the nature of the organizational chart**
- **to practice in drafting job specifications and standard practice procedures**
- **to look into the nature and importance of the organizational manual**

1. Write a two-page précis based on *COMMUNICATION IN MANAGEMENT* by Charles E. Redfield. The volume is on library reserve.
2. Draft a policy statement for a department store on the subject of home delivery of merchandise.
3. Study the work of the custodian at a residence hall or apartment building. Then write his job description.
4. Outline a plan for the development of an organizational manual for some society to which you belong.

23

LEGISLATION

TODAY THE LIFE OF THE AVERAGE MAN HAS A CLOSE RELATIONSHIP TO LAW and law-making. No citizen can escape the impact of the state. He must know what government is planning to do, what it decides to do, and how the laws passed affect him.

More and more people are concerned about what government does *for* them and what government does *to* them. In one year the American Hotel Association sent each of its 6,000 members 244 pages of single-spaced mimeographed explanation and interpretation of federal laws and rulings of 60 different federal agencies. It mailed out additional pages of government forms, reprints of laws, bureau decisions, and orders. In twelve months the legislative reporting job of just this one association required six tons of mimeograph paper! The citizen needs to know how to

1. put his ideas in the proper form of motions, resolutions, city ordinances, and legislative bills for group consideration and action

2. take positions on such proposals and bills while they are under consideration
3. read, understand, and explain the meaning of the proposals once they have been passed by the group or enacted by a legislature

Legislation is the language instrument of social change. From the motion in the lodge to the bill introduced in Congress, legislation expresses policies in sentences to control human behavior. One man may offer a carefully-worded motion in the Parent-Teacher Association meeting. Another may propose an action in a corporation board meeting. A neighborhood may suggest a village ordinance. In all these cases, the citizen is engaged in one of the most necessary, fundamental, and exacting uses of report language. He is drafting statements which have legal consequences. Even when a writer formulates an operating rule for the factory, prepares a job description, or spells out a company policy for the manual, he is engaged in this process of drafting.

DRAFTING AS SPECIALIZED COMPOSITION

Drafting is a specialized form of composition. It puts statements in precise and formal language for the purpose of exact definition of policies. In the past, too many documents have been written in complicated legal concepts phrased in burdened grammatical construction to be read by judges and lawyers of high courts. The public, judges, and now even lawyers themselves are asking why legal writing cannot be expressed in simpler language, so that the man who is concerned can understand. All one needs to do to see how complicated legal language can become is to read an insurance policy. One insurance company begins to talk with Farmer Jones Smith in a first sentence of 220 words imbedded in a burdened grammatical structure set in solid type. The company does not communicate with the policyholder!

FORMULATING THE PROGRAM

Although legislative draftsmanship is a specialized art, the citizen ought to understand its general nature. Before he begins to write, a draftsman makes a careful outline. He asks himself these questions:

1. What result must I accomplish by this statement?
2. What steps are necessary to accomplish that result?
3. How can I describe them for plain men in legal-tight language?

ARRANGE ITEMS IN ORDER OF USE

Every drafted document needs an orderly plan of statement. Preferably this plan should be based upon the sequence of questions which the person to whom it is applicable would normally ask in determining how the law affects him. In a statute this sequence generally runs like this:

TITLE	*To explain the contents at a glance*
ENACTING CLAUSE	*To establish the legal authority by which law is made*
SHORT TITLE	*To provide a name for quick reference*
POLICY	*To explain the reasons for the act*
DEFINITIONS	*To describe the subjects and objects*
ADMINISTRATION	*To make the act work*
SANCTIONS AND PENALTIES	*To enforce the act*
TIME WHEN IT BEGINS	*To establish date effective*

THE STRUCTURE OF THE LEGAL SENTENCES

The structure of a legal sentence divides itself into four parts. These are the:

1. **case**—a statement of the circumstances under which the action proposed is to take effect
2. **condition**—a statement of what conditions must be met to set off the action
3. **legal subject**—a designation of the persons enabled or commanded to act
4. **legal action**—a description of what the legal subject is enabled or commanded to do

1. **Case**	When a person takes a fish
2. **Condition**	except by angling,
3. **Legal subject**	he
4. **Legal action**	shall be fined ten dollars and five dollars additional for each fish so taken.

These same four elements occur often in business documents. The statement of the case begins usually with *when* or *where*, meaning, as Piesse and Smith point out, "if the following circumstances exist."[1] The condition can begin with "if" or similar qualifying conjunction.

FETISHES IN LEGAL LANGUAGE

Despite the fact that drafted documents require a specialized use of language, they fall victim to the same kind of writing weaknesses found in other kinds of prose. A draftsman can save words, for example, by dropping out a good many "shalls." Instead of saying "the term *'person' shall* mean," he can simply say "the term *'person' means* . . . ." He has saved a word.

[1] E. L. Piesse and J. Gilchrist Smith, *The Elements of Drafting* (London: Stevens & Sons, 1950), p. 22.

Or he can often shorten his speech and avoid vagueness by preferring the active to the passive voice.

Passive	*Active*
The chief of each branch shall be appointed by the President from the officers who. . . .	The President shall appoint the chief of each branch from officers who. . . .

The writer can use more live words. He does not need to rely on infinitives, gerunds, participles, and noun and adjective forms denoting action. He can put definitive verbs to work.

Dead	*Alive*
give consideration to	consider
in the determination of seniority, the Secretary is applicable	when he determines seniority, the Secretary applies
at the time of his retirement	when he retires

Likewise, a draftsman can make clearer statement by using positive instead of negative language.

Negative	*Positive*
Air Force officers other than those with no children may. . . .	Air Force officers with children may. . . .

Often draftsmen try to avoid repeating the same word by using different words to denote the same thing. This habit of elegant variation has no place in drafted documents. A synonym used to avoid repetition may confuse the reader.

Again, writers of legal language fall into the habit of pairing words. Ritual in language habits leads some men to use two words to say one thing. Here are examples of the ritualistic use of words in pairs.

any and all	full force and effect
authorize and empower	null and void
each and all	order and direct
each and every	over and above
final and conclusive	sole and exclusive
from and after	type and kind
full and complete	

Sometimes a writer will refer to "none whatever." When one of two paired words includes the other, a writer should use the broader or narrower as the sense requires; he should not use both. There are many paired expressions in common usage such as "authorize and direct," "means and includes," and "desire and require." The rule needs to be applied here: never use two words when one does the job.

is applicable	applies
on and after July 1	after June 30
no later than June 30	before July 1
paragraph (5) of subsection (a) of section 2097	Section 2097 a (5)

LINGO WORDS

Lingo words crop out in expressions such as *aforesaid, aforementioned, and/or, before-mentioned, said, same, to wit, whatsoever, wheresoever.* The writer needs to prune these words out of his working vocabulary. By breaking away from ritual, a writer can reduce stock phrases to single words.

Stock phrases	*Single words*
it is directed	shall
is authorized it shall be lawful	may
in case in the event that	if
in cases in which	when where
for the reason that	because
pursuant to	under
in order to	to
prior to	before
subsequent to	after
at the time	when
per annum	a year
per centum	per cent
under the provisions of	under
provisions of law	law

MOTIONS AS LEGISLATION

While a person may feel that draftsmanship is a subject far removed from his ordinary experience, he knows that in meetings he must often make a motion. He stands to his feet and says, "Mr. Chairman, I move you, sir, that. . . ." The clear phrasing of motions becomes one of the most common and important uses of language of people working in organizations.

The board of trustees of a Community Chest adopted this motion:

that in cooperation with the recreation and group work section each settlement house make a self-evaluation study, to be completed no later than March 1, of

its current program and services to determine the extent to which it is now meeting neighborhood human needs and whether there should be changes in the agency's program and services in the light of possible changes that may have occurred in such factors as age groups, race, special group interests, etc.

This motion could be restated in this way:

The Board of Trustees of the Community Chest invites each settlement house in cooperation with the Chest's recreation and group work section to complete not later than March 1 a self-evaluation study to determine

1. the extent to which the settlement house is now meeting neighborhood needs
2. whether changes in such factors as age groups, race, and special group interests make necessary changes in the program of the agency.

The Westinghouse Electric Corporation proposed to its stockholders this resolution stated in 146 words:

Resolved, That it is the desire of, and it is hereby declared to be the purpose of the Corporation, to increase the authorized indebtedness of the Corporation to the sum of $500,000,000 so that the aggregate indebtedness of the Corporation, from time to time, at any one time outstanding, may be any amount not exceeding such sum, any bonds or other obligations representing such indebtedness to have such provisions as the Board of Directors of the Corporation may determine, and all or any part of which may be secured by mortgage, pledge, deed of trust or otherwise, in such manner and upon such terms as the Board of Directors of the Corporation may determine; and that the question of the proposed increase be submitted, and it is hereby directed to be submitted, to a vote of the shareholders of the Corporation for their authorization and consent.

To make it easy for the stockholders to understand what the action meant, the resolution might have been stated like this:

Resolved, that the Corporation declares its purpose

1. to increase its authorized indebtedness to $500,000,000
2. to establish a policy so that the aggregate outstanding indebtedness of the corporation, including bonds and other obligations, at any time may be any amount not exceeding $500,000,000 as the board of directors of the corporation may determine
3. to secure any and all parts of the indebtedness by mortgage, pledge, deed of trust, or other obligations representing indebtedness, as the board of directors may determine
4. to submit the proposal for the increase of indebtedness to a vote of the shareholders of the corporation for their authorization and consent
5. to submit this resolution for ratification by the shareholders at this time.

DISCUSSION OF PROPOSALS

Once a motion is stated or a bill is introduced, the issue as formulated is ready for discussion. As never before, individuals and groups must study

and support or oppose proposals in which they have a special interest. The participation of interested people throughout the country in legislative action has come to be a major factor in the enactment of laws. Citizens express their opinions by

1. letters to members
2. statements to the press released as news stories or as letters to the editor
3. position statements made before legislative committees at public hearings
4. personal conference with legislators.

In a two-year period the United States Congress receives some 16,000 bills; less than one-tenth of these are enacted into law. On these proposed laws a lot of people have a lot to say!

THE LEGISLATIVE HISTORY

The best way to "watch" a piece of legislation as it is considered is to keep a running legislative history. One of the best guides in writing such a history is the little manual written by William G. Phillips under the title *Operation Congress*.[2] The pattern suggested in this booklet can easily be adapted for use in following legislative action from a fraternal society or town council to the United States Congress. Equipped with this guide book, a man is ready to study legislation.

ANALYSIS OF THE BILL

The first step in legislative analysis is to obtain a copy of the text of the bill, resolution, or motion. It is important to have a copy of the full text. Such copies can be obtained by writing to legislative representatives or through members of an organization. This full text needs to be studied section by section. Thousands of citizens each year express opinions on bills which they have never seen, sometimes on bills which have not even been introduced. No secondhand explanation should be taken. The citizen should actually read the bill and any reports made on it before he forms his own opinion about it. Bills are generally summarized in abstracts.

SECTION V. ACCIDENT PREVENTION BOARD

The bill proposes an accident prevention board for each industry. Of the nine members of the board appointed by the Secretary of Labor, four represent employers in each industry, four represent workers in each industry, and one member represents the public. He serves as chairman. The Director and Surgeon General of the United States Public Health Service are to be *ex officio* members without vote. Board members are to receive no salary but are to receive a reasonable per diem and necessary expenses.

[2] William G. Phillips, *Operation: Congress* (Washington: The American University Press, 1950).

EXPLAIN THE BILL

When a person fully understands a bill, he is ready to explain his position on it, not only to the interested public but to the members of the legislature as well. The explanation of a bill by its supporters is a straightforward position brief. The C.I.O., for example, took a professional interest in

A bill to create in the Department of Labor a Bureau of Accident Prevention for the purpose of promoting and maintaining safe and healthful conditions of employment in industries affecting interstate commerce.

The Senator from Minnesota made a statement in the Senate about the bill. He began:

> Around the clock one American worker is killed or crippled on the job every 4 minutes; one is injured every 16 seconds. This totals nearly 2,000,000 occupational injuries every year. . . .
>
> Instead of improving the record, we lost ground last year; 15,500 were killed—500 more than the year before. Injuries increased 100,000.
>
> The increase in industrial fatalities and lost-time injuries outran the increase in employment. . . .
>
> We are slipping backward in the race for industrial health and safety. . . .

Stated as a very simple position brief, the Senator's stand was this:

I favor the establishment of a Bureau of Accident Prevention in the Department of Labor

because it is necessary to reverse the trend in occupational injuries

because more workers were killed and injured last year than the year before

because the increase in industrial fatalities and lost time injuries last year outran the increase in employment

because forecasts predict an increase in industrial accidents this year

because 90 per cent of all occupational injuries and illnesses and the resultant personal tragedy can be stopped

because industrial accidents and disease cause the loss of six times as many man-days a year as do industrial disputes

because the problem cannot be solved by the crazy quilt of laws on industrial health and safety, varying from state to state

because this lack of nationwide standards encourages disastrous competition between the various jurisdictions with the life and health of workers as the pawns

because a piecemeal, state-by-state approach will continue to condemn thousands of workers to death, disablement, and serious injury that could be prevented by the adoption and enforcement of Federal health and safety standards

because the individual person is the most important asset our country has

because our country in these trying days can ill afford to lose 45,000,000 man-days of production while striving to keep freedom alive in the world

because these direct annual production losses are equal to a work force of 150,000 men idle for an entire year

because this loss is equivalent to closing down one-fourth of our steel mills

because the National Safety Council says that with indirect losses a force equivalent to 760,000 men are idle for an entire year

because industry loses $3,500,000,000 a year as a result of these unnecessary injury costs

because fair competition requires the enactment of this bill

because the total economic time lost on account of industrial accidents amounts to 230,000,000 man-days a year

POSITION ON LETTERS

Letters written to congressmen serve as another vehicle for the expression of opinions. In substance these letters are position briefs. They should not be drafted mechanically under the inspiration of some lobby; rather, they should be written carefully on the basis of matured thought after a man has studied the bill and developed convictions of his own.

STATEMENTS AT HEARINGS

The legislative committee hearing provides another opportunity to express a position for or against provisions of the bill. The committee hearing subjects a bill to public scrutiny. Once again the position brief serves as the document to be used. Both the case brief and the appeal brief may be utilized in subsequent discussions and at other levels of legislation.

EXPLANATION OF LAWS

When a bill is enacted by a legislative body into a law, the statute creates both rights and duties. People want the answer to the question: "What does this law do to me?" The interpretation of law becomes one of the most necessary forms of modern report writing. Such an explanation can begin with an abstract. This abstract can be a one-sentence statement such as

> Public Law 18 prohibits roadside, park, or amusement stands from exhibiting confined birds and animals wild by nature, even though the animal or bird was bred or reared in captivity.

The synopsis outlines in working detail how the law operates.

SYNOPSIS

"Fringe" Benefits—Regulation 13.

Four types of "fringe" benefits may, when specific prior approval has been secured, be granted by employers *even though they pierce the 10 per cent wage ceiling and provided they do not exceed area or industry practice as to amount.*

Specifically, adjustments may be made in:

1. paid vacations
2. paid holidays
3. premium pay related to days or hours of work such as shift differentials
4. call-in pay.

"HOW-IT-WORKS" EXPLANATIONS

At best, legal statement is difficult for the layman to understand. That is why it becomes important for a writer to show *how-it-works*. Here is an example:

GENERAL INCREASE FORMULA

You may raise the level of wages 10 per cent over the level existing in your first regular payroll period ending on or after January 15.

To figure all general increases

include wages, salaries, vacations, holidays, allowances, pension and welfare plans, overtime, night-shift bonuses, and the like;

exclude individual increases for merit, length of service, promotions, and the like.

THE QUESTION PATTERN

A writer can further simplify the explanation of a law by asking questions.

GENERAL INCREASES—EXAMPLES

QUESTION: Suppose the average earnings of the employees in an appropriate unit were $1.70 an hour. On the preceding August 1 a general wage increase of 6 cents an hour was put into effect, this being the only adjustment in wage rates or any form of compensation since the preceding January. It is now proposed to put into effect a general wage increase of 10 cents an hour. Is this permissible under Regulation No. 6?

ANSWER: *Yes.* The 6 cents plus the 10 cents equal 16 cents, which is less than 10 per cent of $1.70.

QUESTION: Suppose the same facts as in the preceding question except that it is proposed to make an increase now of 10 cents an hour and also to put into effect a welfare plan to which the employer will contribute 5 cents an hour. Is this permissible under Regulation No. 6?

ANSWER: *No.* The 6-cent wage increase of the preceding August plus the proposed 10-cent wage increase would add up to 16 cents, leaving only 1 cent available for other adjustments. The increase in contributions to the welfare plan must be offset against the permissible 10 per cent.

THE "HOW-TO-DO-IT TABLE"

For quick reference, average men find an easy-reference table helpful to show them what-to-do and how-to-do-it in specific situations. Here is an example prepared by a committee of the American Bar Association.

REGULATIONS GOVERNING APPROVAL AND REPORTING OF COMPENSATION PAYMENT AND ADJUSTMENT

	Payment permitted if existing practice		If practice is introduced adjusted or modified	
Type of compensation	*Approval needed*	*Reporting*	*Approval needed*	*Reporting*
General increase within permissible 10%	No	File WS-6a within 10 days at Wage-Hour office		
General increase above permissible 10%			Yes	File WS-100 at Wage-Hour office
Merit or length of service increase-rate range structure:				
(i) past practice	No	No, but maintain records	Yes	File WS-100
(ii) 6% plan	No	No, but maintain records		
(iii) established plan	No	No, but maintain records	Yes	File WS-100
Merit or length of service increase—random rate structure:				
(i) past practice	No—Individual at top of group limited to 5% others 10%	No, but maintain records	Yes	File WS-100
(ii) 6% plan		No, but maintain records		
Merit or length of service increase—single rates			Yes	File WS-100

The "how-to-do-it" table demonstrates the steps which need to be taken:

ESTIMATING YOUR PAYMENT

THE NEW METHOD

	For Example
Add your wages and self-employment income covered by the law after 1950 or after you reached 22 if later (not over $3,600 for any one year)	*If you reach 65 in January 1955 and claim your payment then.* *Suppose that your total wages and self-employment income were $11,040. January 1951 – December 1954=48 months*
Divide by the number of months after 1950 (if less than 18, use 18. The average cannot be more than $300 per month.)	*$230 average* *48 /$11.040*
Take 50% of the first $100 of your average monthly wage	*50% of $100=$50 plus*
Add 15% of the remainder up to $200	*15% of $130=$19.50*
The total is your old-age insurance amount	*$69.50* per month

See page 14 for table of payments figured by this formula.

Still another pattern of explanation is the "discovery table" which visualizes the applications of the law. By running his finger along the chart or table, a man can say, "There I am! Here's what hits me!"

READINGS

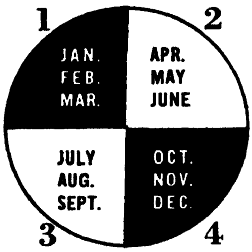
Cook, Robert N., *Legal Drafting*. Brooklyn: The Foundation Press, 1951.

Philbrick, Frederick A., *Language and the Law*. New York: The Macmillan Company, 1951.

Phillips, William G., *Operation: Congress*. Washington: The American University Press, 1950.

Piesse, E. L., and J. Gilchrist Smith, *The Elements of Drafting*. London: Stevens & Sons, 1950.

Four Calendar Quarters



The yardstick for measuring whether or not you are insured under the law is the "quarter of coverage." A quarter of coverage is a 3-month period beginning January 1, April 1, July 1, or October 1—a calendar quarter—in which you were paid $50 or more in wages (or in which you were credited with $100 or more in self-employment income covered by the law).

If your self-employment net earnings are $400 or more for a full taxable year, you will have four quarters of coverage for that year.

Fully Insured

You will be fully insured when you reach 65 if you have at least one quarter of coverage for each two calendar quarters that have passed after 1950. At least six quarters of coverage are necessary in any case; when you have 40 quarters of coverage, you are fully insured for life.

In the following table, find the year in which you will become 65 years of age. If you become 65 in the first 6 months of the year, the figure in the center column is the number of quarters of coverage you will need at 65 to be fully insured. If you become 65 in the last half of the year, the number of quarters of coverage you will need is in the right column.

	January through June	*July through December*
1953 or earlier	6	6
1954	6	7
1955	8	9
1956	10	11
1957	12	13
1958	14	15
1959	16	17
1960	18	19
1961	20	21
1962	22	23
1963	24	25
1964	26	27
1965	28	29
1966	30	31
1967	32	33
1968	34	35
1969	36	37
1970	38	39
1971 or later	40	40

TRY YOUR HAND AT THESE •

- **to learn the nature of legal language**
- **to develop skill in drafting motions and resolutions**
- **to gain experience in preparing a legislative history**
- **to demonstrate the means of influencing legislation by reports, letters, and committee appearances**
- **to practice in drafting simplified explanations of laws**

1. Refer to the laws of your state. In the code index find a reference to the career field about which you are writing. Select an important regulation that relates to this career. Then write a letter analyzing the structure of a legal sentence.
2. You are preparing to attend a class meeting which will make the decision about scheduling a Career Day. Draft a motion which you propose to introduce at the proper time.
3. For the remainder of the session, you are going to take a special interest in a bill which has been introduced into Congress. Select any bill of interest to you. If you have no preference, refer to the *Congressional Record* in the library. Write your congressman for a copy of this bill. By reference to Phillips' *Operation: Congress,* on library reserve, or by the purchase of an individual copy, keep a legislative history of the bill as it moves along.
4. A friend asks you to explain what the bill is all about. Write a brief analysis of the bill.
5. You become concerned about the passage of the bill. Write a letter to your Congressman telling him why you think he should vote for the bill.
6. Write a letter to the editor of your local newspaper supporting the passage of the bill.
7. You are asked to explain the speed laws of the state. Refer to the state code and develop a clear explanation of what the speed laws are and the penalties for their violation.

24

THINK OPERATIONS

A MANAGER CONTINUALLY FACES PROBLEMS TO WHICH MORE THAN ONE solution is possible. Which one of several available courses of action shall he pursue? What is going to be the policy on which he will base a program of action? As he hesitates in the process of action, weighs alternatives, and conquers a doubt by a decision, a creative act takes place in the history of the event which is in process of unfolding. John Dewey often said that when a man comes to the forking of the road, he must look for signposts, for evidence that will support his choice of one or the other road to travel. He reflects. He searches for reliable facts on the basis of which he can reason out his selection of the right highway to travel to his destination. Whenever a man confronts an issue and goes through the process of selecting one course of action among alternatives available to him, he is engaged in a "think operation." In the conduct of an organization these "think operations" become decisive for sound action, growth, and development.

This chapter discusses five kinds of "think operation" reports used to help managers weigh alternatives as they make decisions which lead to right action. These types of report are:

1. **think memorandum**—a discussion "right from the heart" of an idea that someone is in the process of giving birth to, a communication of an idea which may be realized tomorrow, a "map" of a "territory-to-be"
2. **pro-and-con memorandum**—a document which explores both sides of a question and leaves the report reader to make his own decision
3. **position brief**—a document stating a decision already arrived at by the writer and supporting his stand by giving specific reasons
4. **case brief**—a concise statement of a position for presentation to a person or persons who will make a decision
5. **problem paper**—an examination and evaluation of the perplexing situations in terms of all available solutions for the purpose of identifying the one best course of action

THINK MEMORANDUM

A think memorandum explores an idea which the writer proposes for organizational action. Although routine operations consume most of the time of personnel, people who look ahead and have interest and imagination occasionally let their thoughts roam. They come up with a new idea. A think memorandum revolves a pregnant idea around in the mind, reflects on it, experiments with it, and eventually puts it down on paper. This *operational introspection of creative associates* exists as one of the growing points of enterprise. When a staff member begins to produce an occasional mature think memorandum, he joins the top leadership in his organization.

An associate submitted a think memorandum to Elmo Roper, opinion research analyst. In part it said:

MEMO TO: Elmo DATE: October 18

FROM: Lou

SUBJECT: SOME IDEAS

I think we ought to do a series of national thought leader studies. The thought leaders we survey ought to vary according to the subject we are going to survey. Here are some illustrations:

. . .

That's all for the moment.

A young foundry engineer felt that a shell molding process could be developed for a high-production operation. He wrote:

I have the feeling that we could squeeze the bugs out and substitute a shell molding process for the green sand process, with substantial profit and efficiency advantage.

The shell molding process as used in Germany utilizes a mixture of sand and phenolic resin for deposition under pressure upon a heated metal pattern. After a suitable cure period at elevated temperatures, a mold results with inherently high accuracy, good strength, and unlimited storage time ability.

When you're ready to talk about this, I've got the details—operational, financial, and technical.

A factory foreman was thinking about the efficient use of fork trucks. He wrote a think memorandum like this:

Can't we effect savings by more effective use of our fork trucks? I'm thinking about improved work methods, work areas, supervision, operator training, preventative maintenance, and even improved functional design.

Can't we reduce "dead-heading," idle time, and unusual operations?

What I have in mind is beginning with a self-recording test equipment to indicate the length of time a lift-truck has a load on its fork simultaneously studied against the amount of time the same vehicle is in motion.

A chemical engineer had an idea about bonding butyl rubber to brass. He had considered the possibilities and wrote a think memorandum like this:

I've been thinking about the reinforcing effect of carbon blacks on the adhesion bond. I suspect that the effect of reinforcing carbon or butyl rubber increases with the number of apparent cross links present per unit volume of elastomer *as well as* increasing with the stiffness factor.

Since the empirical equation does not apply in the instances of failure at the interface where adhesive rather than cohesive failure results, I have found an equation which does apply:

$$Z = 1/a \left[\int_{V_0}^{V_1} \int_{E_0}^{E_{Br}} T\,dE\,dV \right]^{1/2} + 2$$

Correlation suggests the relative importance of physical versus chemical factors in explaining the differences of adhesive properties of different butyl rubber compositions to brass.

When would you like to talk about this?

A metallurgist suspected that the design of a new type die, basically of the type of a porthole or spider, would produce better quality brass tubes. He proposed:

Metallurgical research is improving hot-welding conditions for a higher copper content. Since a brass of more than 85 percent copper content does not hot-

weld at the present time, research may soon make practicable and economical the use of the porthole die for brass tubing production.

I'm ready to support a position that we can and ought to be leaders in the utilization of this newer method.

In level of language usage think memorandums range from the highly informal to the literary. The speech level depends upon the way the people talk to each other in their business relationships.

PRO-AND-CON MEMORANDUM

Pro, the Latin preposition, means "for"; *con* stands as an abbreviation for *contra* meaning "against." In everyday language the phrase "pro and con" has come to be an invitation to look at both sides of a question. The fundamental operation in the "for-and-against" memorandum is the itemization of each proposition set forth to support each side of the argument. These rival arguments are put down in parallel vertical columns. By placing the reasons "for" beside the reasons "against," a man can weigh them, one by one, until he comes to an informed conclusion. In classifying arguments a writer can often make two piles of the cards on which he has his notes: one for "pro" reasons and the other for "con." A pro-and-con table looks like this:

Subject:

Pro	*Con*
1.	1.
2.	2.
3.	3.

The tabulation is not always included in the finished memorandum, but it serves as the basic work sheet in the analysis of the respective arguments. A form for presenting a pro-and-con memorandum follows:

PRO-AND-CON MEMORANDUM

1. Definition of the issue and of the terms used
2. History and background of issue
3. Controlling assumptions of the respective parties

   Examination of contestants and contesting groups in terms of the context of their activities and the interests and affiliations which they represent, the theory being that each party selects and groups facts on the basis of some fundamental proposition. A writer should identify and state those fundamental propositions clearly.
4. Differences in philosophy, outlook, and objectives of contesting parties
5. Comparative analysis of the issues

ISSUES

Pro	*Con*

[*One sentence statement in tabular form.*]

6. Discussion of *pro* arguments
7. Discussion of *con* arguments
8. Summary of issues and evaluation of positions

POSITION BRIEF

At times a man must state clearly where he stands on an issue. These position statements range all the way from a problem of egg deliveries in a chain store system to a brief by the American Bar Association on communism or by Winston Churchill on the Suez Canal. Take, for example, two memorandums dealing with eggs.

Memorandum 1 June 5th

The notation that came in the mail today stating there will be no egg orders delivered on produce specials should be discussed carefully with the superintendents. In a great many cases our stores do not have adequate refrigeration to carry eggs four or five days. Stores that get eggs delivered on Wednesday and Monday will sometimes have eggs on hand in the hot room for four or five days.

Our egg sales have had very little customer complaint; but unless eggs are kept cool in this hot weather, I fear our business will go down and it will be very difficult to get back. In addition to this, we may get in trouble with the State Egg Inspectors and be forced to take the word "Fresh" off our Ideal cartons.

To me, this is all a very serious matter and I trust you will give it the proper consideration.

Memorandum 2 June 20th

This new system of two deliveries of eggs a week is not working out and, in my opinion, will hurt our egg sales. A store that has good eggs usually has fresh products in other lines. I would be neglectful if I did not go on record in this matter.

Superintendents report that some stores are running out of eggs; and, at the other extreme of the problem, we have eggs that stay in a hot store for four or five days and will not please Mrs. Schultz.

It is all right to instruct managers to keep eggs under refrigeration, but the facts are that few of them have the room. We are only fooling ourselves if we think they do! In most cases where there is refrigerated space, products such as milk, butter, and produce usually get the preference.

The present system has a five-day span for deliveries in many cases. We spoke about the Wednesday and Monday deliveries. We also have the same thing on Thursday and Tuesday. In my opinion, the whole present system must be revised, probably to a regular system of three deliveries a week.

When these memorandums are analyzed, it is obvious that they are written by the egg buyer in the chain store system who knows more about

eggs than anybody else in the organization—and also cares more. *He knows and strongly feels.* In substance he says:

MY POSITION IS:

because

because

because

because

because

This is the formula for the position brief. The egg buyer is really saying:

My position is that eggs should be delivered three times a week rather than twice a week as directed in Order No. 263 dated June 1

1. because Mrs. Schultz wants to buy fresh eggs
2. because customers who buy fresh eggs know the store has fresh products in other lines
3. because superintendents are running out of eggs
4. because managers lack adequate refrigerator space
5. because eggs are the last products managers put in the coolers when they are cramped for space
6. because the new system has five-day spans in many instances
7. because the state egg inspector may order the company to take the word "fresh" off the cartons
8. because the egg business will fall off and there will be difficulty in bringing it back

Now to examine the validity of the position which the egg buyer has so firmly taken, an executive needs only to deal with the numbered propositions produced in support of the stand. The egg buyer's position is defined in a form so that his boss can look at it. To present any position so that it can be examined on its merits is a necessary but difficult job. A writer must be convincing and at the same time courteous and tactful. Much heat and little light develop when positions are just affirmed or denied *unless* the position is *sportsmanly defended* on the one hand and *respectfully examined* on the other as the sincere statement of a competent person who has arrived at a conclusion.

CASE BRIEF

A case brief recognizes that there are two sides to the question under discussion. It supports one side. The case brief presentation is therefore an adversary proceeding. It is the writer *versus*. It is the writer taking the initiative to support an idea, or it is the writer defending an idea. The case brief is just a way of thinking through problems by a systematic contest

to find out what the facts are and on the basis of those facts what is the right and best course of action. The structure of a case brief is substantially the same, whether it presents a point of view in a committee meeting, before a judge, or on a newspaper page bought to rally public opinion to a particular point of view.

Here is a formula for a case brief:

CASE BRIEF

Subject:

Part I Abstract

In this section the writer states what he proposes to achieve. He analyzes chronologically and concisely in a historical narrative what statements have been made for and against the action he requests.

Issues

Inventory of the points in controversy in a series of questions:

Question 1 ?

Question 2 ?

Question 3 ?

Question 4 ?

Question 5 ?

PART II. *Statement of Facts and Arguments Supporting the Writer's Position on the Questions Raised*

PART III. *Summary of What the Writer Believes to Be the Other Sides Facts and Arguments*

PART IV. *Statement of Controlling Principles to Be Applied to the Evidence as Presented to Support the Case*

PART V. *Brief Summary of the Writer's Case and Reasons Supporting It*

APPEAL BRIEF

In organizations, differences of opinion often have to be carried to higher echelons of management for final decisions. The issues go to the very roots of organizational policy. Much as a lawyer drafts an appeal brief, responsible men will have occasion to argue their points to higher authority. The issues sometimes become personal and bitter; they should, however, be approached with objectivity. A writer is merely trying, by courteous exploration of an issue, to arrive at the one best answer to the question. Here is a formula for the preparation of the statement for discussion and review of a position at the level above.

Preliminary Statement

Concise one-sentence statement of the issue under discussion

Statement of Facts

A. Facts agreed on
B. Specification of difference

Specification of Error

Why was the decision in the office below not right?

POINTS

I.

II.

III.

N.

Argument

I

Statement of Proposition—indent and double underline.
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXX

Discussion
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

Supporting facts and opinion
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXX

II

III

N

A. *Italicized sub-propositions sometimes used for emphasis*

B. . . . .

C. . . . .

N. . . . .

Conclusion

Statement of grounds on which the decision below can be reversed; draft of proposed order which, if issued, will adjust the issue as the writer thinks it should be handled.

Respectfully submitted,

PROBLEM PAPER

Statecraft has developed the problem paper as a form of report designed specifically to think issues through, to explore alternative courses of ac-

tion, and to arrive at the one best course of action. The method of analysis used is one in which *multiple-alternative solutions* are weighed and one by one eliminated until the one best solution remains as the recommended

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September 24, 1955

Paul F. Douglass, Esquire
Drake Hotel
Chicago, Illinois

Dear Mr. Douglass:

Shortly, you will be called upon to cast your vote in a referendum of the International and Comparative Law Section of the American Bar Association. You will be asked to vote for or against the Kilgore-Dirksen bill, or, to put it more succinctly, whether or not private property taken from German and Japanese nationals should or should not be returned. The issues have been beclouded by arguments, the underlying facts of which cannot easily be scrutinized. It is the purpose of this short brief to present the issues denuded of passion and unsupported references.

By Sec. 12 of the War Claims Act of 1948, the Trading With the Enemy Act was amended so as to retain vested property and to preclude payment of compensation therefor. There can be no dispute about the fact that this was confiscation. It has been said that these assets have been confiscated by the German Government, not by us, because the recent Bonn Agreements are said to contain a consent to the confiscation by the Government of the Federal German Republic. --The United States Supreme Court has held in Cummings v. Deutsche Bank, 300 U.S. 115, 81 L. ed. 545, 57 S. Ct. 359, that, after assets are vested by our government,

> "the alien enemy owners were divested of every right in respect to the money and property seized and held by the Custodian under the Trading With the Enemy Act."

Thus, there was nothing left for the German Government to confiscate.

The question remains whether the Bonn Agreements contain a waiver by the German Government of claims of the divestees. Under accepted rules of the Law of Nations, a government can waive claims of its citizens. The Federal German Republic thus <u>could have</u> waived but the claims of its own citizens, not those of American, Swiss, French and other divestees whose property was vested because they may have resided within enemy territory. But it did not agree to any waiver. Mr. E. W. Debevoise, who wrote the respective section of the Bonn Protocols for our government, explained its provisos at Philadelphia as follows: Chapter VI, Article 1 determines that all questions of reparations are to be

Fig. 24.1. Practical use of appeal brief

course of action. By a factual analysis of the situation, by an inventory of all the possible alternative courses of action, and by a critical, comparative evaluation of the costs, risks, and consequences of each course, a writer

arrives at his *position*. Here is a general pattern for the preparation of a problem paper:

Problem Paper

I. *Statement of the problem*
  A. definition
  B. discussion

deferred until the final peace treaty and that the following articles are to govern mutual relations in the interim: Germany undertook not to raise objections against our actions in regard to these assets during that interim period and to ensure eventual compensation of the owners. Thus, the question was left open to future determination, different from the Treaty of Versailles wherein Germany renounced similar claims, whereafter we returned the assets, nevertheless.

Occasional statements to the contrary notwithstanding, it has become settled law in the United States that private property of enemies in this country is not protected by our constitutional safeguards against confiscation. But it is remarkable that the great jurists of our past, whenever pronouncing this principle, have never failed to call its practical application abhorrent, outdated, disreputable or obloquious. Mr Chief Justice Marshall said in Brown v. U.S., 8 Cranch 110, that this right is "now seldom brought into play in the practice of enlightened nations." Mr. Justice Cardozo adopted his view in Techt v. Hughes (1920) 229 N.Y. 222, 128 N E 185, 11 A L.R. 166. Alexander Hamilton had this to say:

> "No powers of language at my command can express the abhorrence I feel at the idea of violating the property of individuals, which, in an authorized intercourse, in time of peace, has been confided to the faith of our government and laws, on account of controversies between nation and nation. In my view every moral and political consideration unite to consign it to execration."

And Mr. Justice Paterson said (3 Dall. 264):

> "The truth is, that the confiscation of debts is at once unjust and impolitic; it destroys confidence, violates good faith, and injures the interests of commerce; it is also unproductive, and in most cases impracticable.***** The gain is, at most, temporary, and inconsiderable; whereas the injury is certain and incalculable, and the ignominy great and lasting.***** Confiscation of debts is considered a disreputable thing among civilized nations of the present day; and indeed nothing is more strongly evincive of this truth, than that it has gone into general dessuetude, and whenever put into practice, provision is made by the treaty, which terminates the war, for the mutual and complete restoration of contracts and payment of debts."

These principles, based on international morals as they are, have not changed in modern times, as evidenced by Hyde (2nd ed. 111, 1736) and the statements made by Cordell Hull (May 27, 1935) and Mr. Dulles (hearings on this bill p. 162). --And, indeed, while the United States has often resorted to such confiscation, there has never been an instance in our national history when we have not returned or paid compensation for, such private property.

Fig. 24.1. (*cont.*)

C. sharp focus and statement of problem in single sentence concluding the section

II. *Background and development of the problem*
  A. point by point discussion
  B. sharp focus and statement of background and development of problem in single sentence concluding the section

Contradiotory statements have been made from time to time as to the status of the Law of Nations on the question. In the United States, domestic law overrides international law so that the Law of Nations, as applied by the United States, is fairly clear. The Law of Nations, as applied by other nations, however, considers the taking of private property to be illegal. This has been so determined by the International Court at The Hague in 1926 (Arrêt No. 7 of May 25, 1926) and no new and contrary decision on the point has ever been rendered.

There remain only questions of policy. Two sets of policies are involved in the issue: The policy of our system of law on one side and national foreign policy on the other.

While it is not within our province to act in an advisory capacity as to our foreign policy, it can well be expected of us to recognize a foreign policy, once its course has been determined by the Congress and the President: Germany is considered to be a necessary part of our defense system and has become an ally. How, then, can we continue to treat Germans as enemies when simultaneously they are allies and may be required to lay down their lives as well as their property in defense of our joint beliefs?

The question of policy of the law is very much within the province of this Section and of the American lawyer at large. Abhorrence toward confiscation without fair compensation has been instilled in generations of American lawyers to the effect that we stand up in arms whenever there is any indication of such action. Indeed, the report of the special committee of the Section on the Kilgore-Dirksen bill is the first instance in the history of this our country that has come to the writer's attention, where a body of lawyers has seriously and publicly proposed the commission of such an act. Let us avoid such pitfalls. Even if there may be some momentary financial disadvantage connected with it, we should endeavor to adhere to the principles that constitute the very foundations of our way of life.

The Kilgore-Dirksen bill may well be improved in details. But in principle, it is sound and reflects but the policy of the law this nation has followed since its inception.

I hope that I have been able to clarify the issues somewhat for you, and remain

Very truly yours,

George Eric Rosden

GER/f

Fig. 24.1. (*cont.*)

III. *Main issues*

A. inventory of issues
B. discussion of each issue
C. sharp focus and statement of import of issues considered together in single sentence concluding the section

IV. *Alternative courses of action*

A. issue 1—statement
   1. alternative course one
   2. alternative course two
   3. alternative course three
   4. alternative course *n*

B. 1. alternative course one
   2. alternative course two
   3. alternative course three
   4. alternative course *n*

V. *Best course of action*

A. clear description of course
B. summary of reasons for selecting course
C. implications
   1. costs
   2. risks
   3. consequences

D. implementation
E. sharp focus and statement of position as a policy—single sentence concluding the paper

THE HABIT OF MATURE PARTICIPATION

The mastery of the various types of think-operation reports gives a writer skills of leadership in the hierarchy of management. If he develops the habit of thinking problems all the way through and knows why he takes the position that he does, he will find himself respected for the maturity of his participation. The constructive attitudes which accompany the habit of writing out ideas tend to characterize a writer's behavior as being endowed with the humane qualities of tolerance and good nature in conferences. To achieve this pattern of conduct is a goal toward which men should aspire. No matter how a person feels "inside," he should avoid every suspicion of contentiousness and quarrelsomeness. Under all circumstances he should behave like a gentleman. Once in a board meeting of a large corporation a director arose and said: "It is more difficult to be a gentleman than to be a Christian." If a writer exhibits the qualities of fair play and sportsmanship, he will find himself a real factor in group problem-thinking.

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TRY YOUR HAND AT THESE •

- **to stimulate thought**
- **to use the reporting tools discussed in the chapter to sharpen thinking**
- **to practice writing various types of "think memorandums"**

1. Write a "think memorandum" in which you propose the idea of a group-sponsored Career Day.
2. As the proprietor of an established quality store, you are considering the discontinuance of home delivery. Write a pro and con memorandum on the subject.
3. Your local merchant's association is considering closing stores on Monday nights and opening them on Saturday nights. Write a position brief in support of the advantages of one of the nights.
4. The merchant's association seems to be developing sentiment for opening on a night which you oppose. You believe your position is sound. Prepare a case brief for arguing your point at the next association meeting.
5. After thinking through the content of the letter given in Figure 24.1, write a letter to your congressman telling him how you feel he should stand on this subject.

25

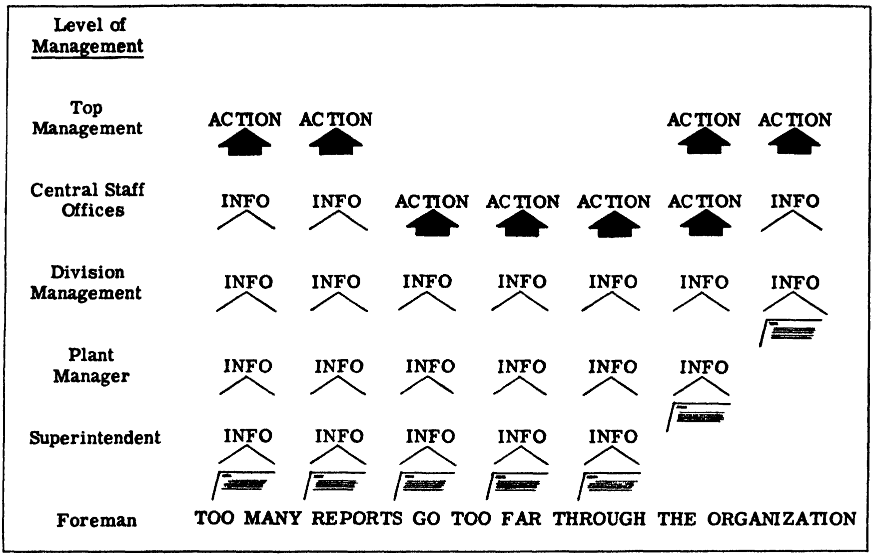
EXECUTIVE REPORTS

PROPER REPORTING TO TOP MANAGEMENT GIVES STRENGTH TO EXECUTIVE leadership. A top management report should present, in agreed upon form, the information needed to plan and control the activities of an organization. Such a report needs to be accurate, brief, current, comparative, and analytical. It must be submitted on time.

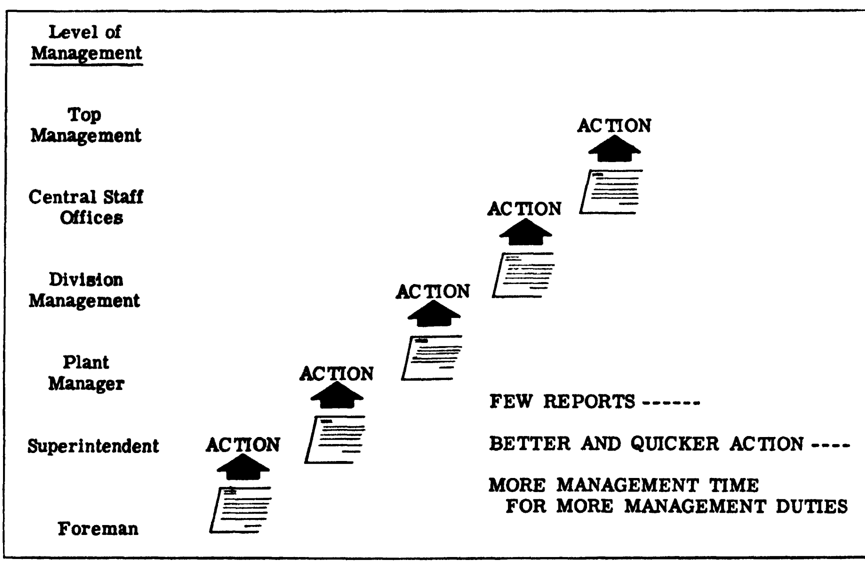
Properly planned and scheduled, an executive report simplifies management tasks. It eliminates the need for following the routine detail of operations. It gives the executive assurance that he has the facts in hand for planning and control. The report gives him more "breathing space" for creative activity. In the year that the American Institute of Management described the Hotels Statler Company as without doubt the best company in production efficiency, Arthur F. Douglas, then Statler president, said:

The top executive of a company should not become too embroiled in detailed figures, but should keep his eye on the broad picture as a whole, leaving to his

subordinate officers the task of delving into intricate details. My system works. I have known executives to have so many reports on their desk that they never get around to reading them.



POOR FINANCIAL CONTROL



GOOD FINANCIAL CONTROL

From REPORTS TO TOP MANAGEMENT *(New York: American Management Association, 1953), pp. 114-15.*

Fig. 25.1. Control in relation to report action points

REPORTS AT ACTION POINTS

The basic principle of executive reporting is this: Information should be selectively presented at each operating level in the detail necessary for information, decision, and action *at that level.* Each officer at his own point of responsibility needs facts to guide him. Good communication and control provide for prompt and responsible action at each management level as Figure 25.1 visualizes the principle. George E. Altmansberger of the Ford Motor Company says that the real question to ask in building a system of executive reports is this: "Who needs to know what? And when?" The executive report is like a road map: it shows traveled distance; it indicates the highway which lies ahead.

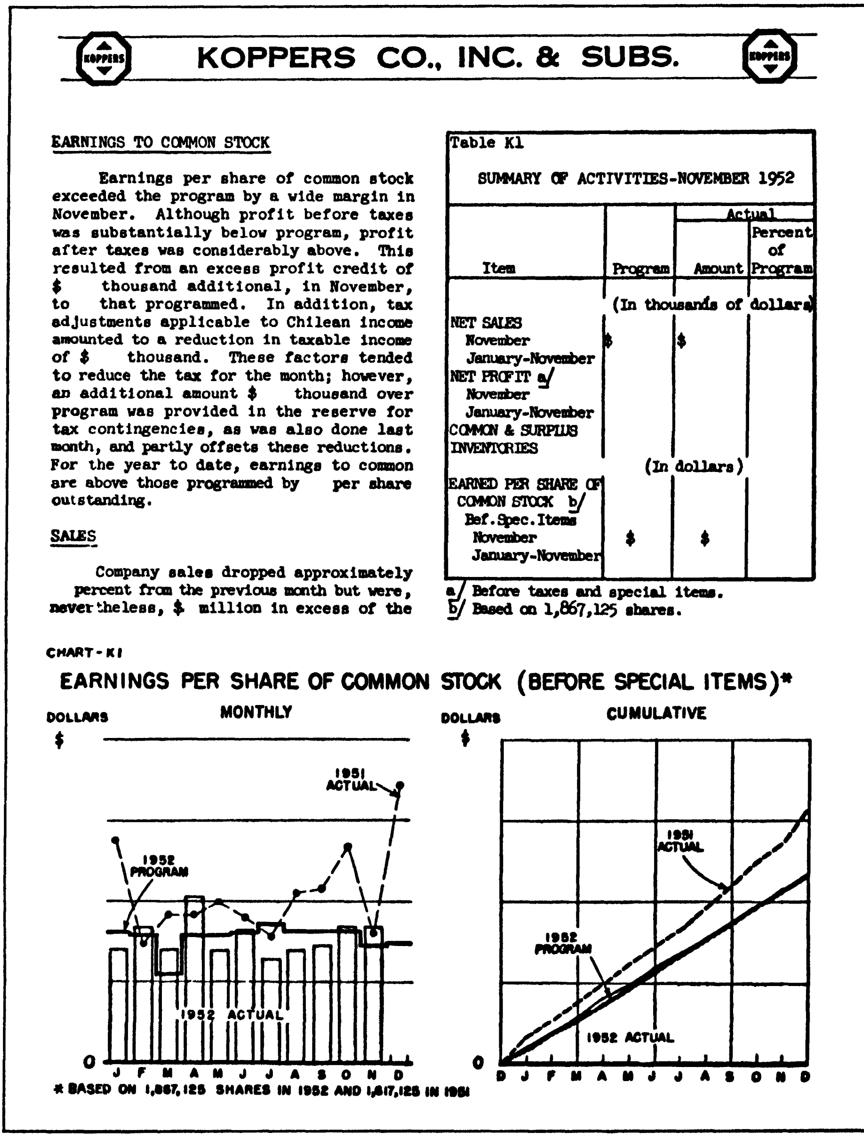
FORMS OF EXECUTIVE REPORTS

From its years of experience in the field of management methods, the Trundle Engineering Company believes that the following eleven reports are essential to the top management of any business:[1]

1. **Monthly profit and loss statement.** This report should show for the month: (1) the actual performance compared to the budgeted expectation, (2) actual sales with supporting schedules for each major class of expense, and (3) cumulative figures from the beginning of the fiscal year. The report should be available on the tenth of each month.
2. **Labor force.** This report should show the hourly and salaried employees classified by departments and major occupations. A daily report should show the number of employees working on that day.
3. **Payroll distribution.** This report should classify the labor force as to direct and indirect by departments and should show the excess direct labor cost compared to standard, and the actual indirect labor compared to budgets. The report should be made daily, weekly, and monthly.
4. **Sales.** This report should show sales, shipments, and unfilled orders in units and dollars compared with a standard or budget. It should give the information both daily and cumulatively from the beginning of the month.
5. **Financial data.** This report should show cash, collections, disbursements, receivables, payables, and purchase commitments both daily and cumulatively from the beginning of the month.
6. **Production.** This report should show the number of units scheduled and actually produced, classified by types. The report should be issued weekly.
7. **Budget forecast.** This report should show, in the form of a profit and loss statement of operations, estimated sales and profit and loss for the next month. It should be issued monthly and should be supported by a manufacturing forecast and detailed schedules of expense for the manufacturing program.

[1] George T. Trundle, *Managerial Control of Business* (New York: John Wiley & Sons, 1948).

8. **Cash forecast.** This report for the fiscal year should show estimated sales, collections, and disbursements by major classes of expense, including capital expenditures and cash available or required month by month. This forecast should be prepared yearly but should be adjusted each month for the following months when any large variation makes this necessary.
9. **Inventory.** This report should show the amount and quantity of inventory, aged by groups according to degree of obsolescence.



KOPPERS CO., INC. & SUBS.

EARNINGS TO COMMON STOCK

Earnings per share of common stock exceeded the program by a wide margin in November. Although profit before taxes was substantially below program, profit after taxes was considerably above. This resulted from an excess profit credit of $ thousand additional, in November, to that programmed. In addition, tax adjustments applicable to Chilean income amounted to a reduction in taxable income of $ thousand. These factors tended to reduce the tax for the month; however, an additional amount $ thousand over program was provided in the reserve for tax contingencies, as was also done last month, and partly offsets these reductions. For the year to date, earnings to common are above those programmed by per share outstanding.

SALES

Company sales dropped approximately percent from the previous month but were, nevertheless, $ million in excess of the

Table K1

SUMMARY OF ACTIVITIES-NOVEMBER 1952

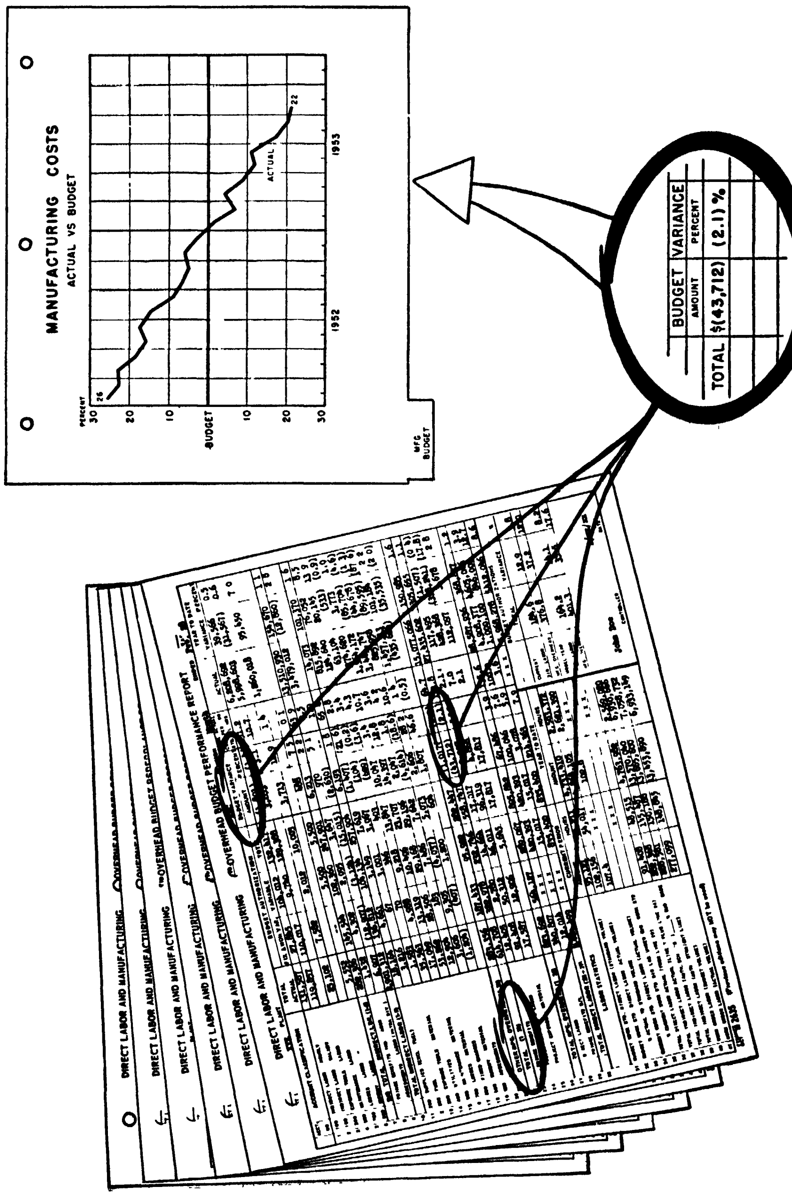
Item	Program	Actual Amount	Actual Percent of Program
	(In thousands of dollars)		
NET SALES			
November	$	$	
January-November			
NET PROFIT a/			
November			
January-November			
COMMON & SURPLUS			
INVENTORIES			
	(In dollars)		
EARNED PER SHARE OF COMMON STOCK b/			
Bef. Spec. Items			
November	$	$	
January-November			

a/ Before taxes and special items.
b/ Based on 1,867,125 shares.

Fig. 25.2. Koppers monthly progress report—text, chart, and table

10. **Engineering projects.** This report should show projects completed and their cost, projects contemplated with their estimated costs, and the status of projects being worked on, with their cost to date compared to their estimated cost. This report should be prepared monthly.

11. **Capital expenditures.** This report should show capital expenditures classified by major types. It should show the annual budget, commitments, and



From REPORTS TO TOP MANAGEMENT *(New York: American Management Association, 1953), p. 117.*

Fig. 25.3. Ford Motor Company advisory report

actual disbursements made. The report should be made monthly, but the data should be cumulative from the beginning of the fiscal year.

Koppers Company issues a monthly progress report (Figure 25.2) made easy-to-read by the studied use of text, tables, and charts. This single document ties together the information needed at top management level. In months when operating experience is bad, the report is issued earlier to provide for quicker remedial action.

Thompson Products makes extensive use of charts in reporting at top management level. At the beginning of each year, basic charts are prepared in 8½" x 11" format. Each chart is photographed on transparent film. Subsequent entries are made directly on the film by the use of a variety of colored inks and water colors. Thus the films become a cumulative record reporting the running experience throughout the fiscal year. In top level conferences these charts are projected on the screen.

Ford Motor Company likes what it calls "Advisory reports" (Figure 25.3). Much executive time is saved when a telegraphic synopsis points to spots that need attention.

The highlights of a report are sometimes formed into staccato sentences to give the executive a first quick orientation. One company introduces its report with a concise statement of conclusions:

A. The operating results for the month of November after all charges but before federal taxes on income show a profit of $111,111 as compared with $111,111 for the same month of previous year—a decrease of $11,111.
On a cash basis—that is, before any depreciation—the company earned $111,111.

B. The operating results for the first eleven months after all charges but before federal taxes on income show a profit of $1,111,111 as compared with a profit of $1,111,111 for the first eleven months of the previous year—an increase of $111,111.
On a cash basis—that is, before any depreciation—the company earned $1,111,111.

C. Net income (after all charges and provision for federal taxes on income) for the first eleven months amounted to $1,111,111 or the equivalent of $2.45 per share of outstanding common stock as compared with $2.70 for the first eleven months of the previous year, both years based on the number of shares outstanding at the end of the month. However, earnings per share for the first eleven months of the previous year were $2.84 on the number of shares outstanding on November 30 of the previous year.

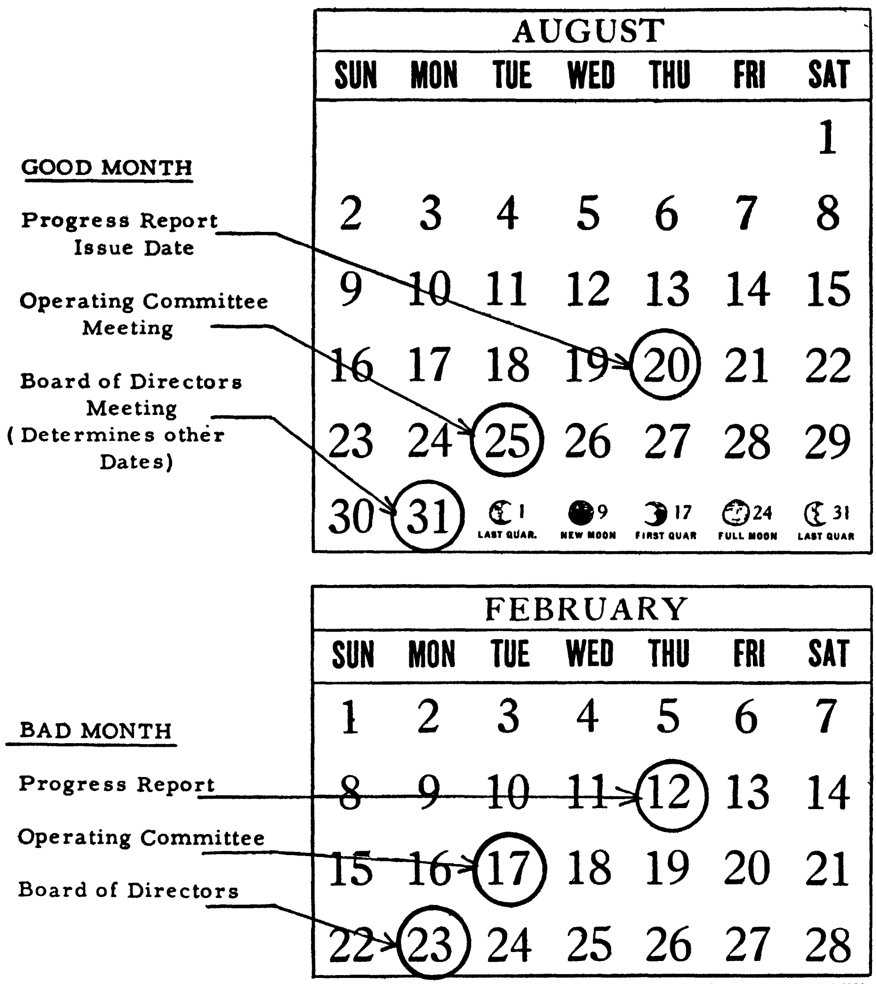
Observations follow the conclusions in terse numbered sentences:

1. *Inventories and Operating Supplies* show an increase of $111,111.
2. *Deferred Reserves* show an increase of $111,111 due to fixed charges exceeding actual expenditures by that amount.
3. *Surplus and Undivided Profits*. . . .

EXECUTIVE CONSIDERATION OF REPORTS

Reports have value only when the information they convey leads to action. Good management sets a regular time on the calendar for the consideration of reports. The operating committee of Koppers Company meets on a stated day to deal with the monthly program report, (Figure 25.4). If the experience is bad, the session is advanced one week.

Williamson Heater Company reviews the quality of its performance in a weekly staff meeting. The president of the company presides. Minutes are kept, promptly transcribed, and circulated to members the morning



From REPORTS TO TOP MANAGEMENT *(New York American Management Association, 1953), p. 64.*

Fig. 25.4. Policy action on progress report—good and bad months

following the afternoon meeting. Attendance at the meeting is a sacred obligation of the executives.

The whole reporting process of an organization must operate to provide top management with the information necessary for planning policy, measuring performance in terms of stated objectives, and adjusting activities to the reality of situations.

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TRY YOUR HAND AT THESE •

- **to inspect the problem of reporting at control points**
- **to view reports essential to top management**
- **to see how some large companies make use of reports at top management level**

1. Interview a local industry. Analyze the reporting system and then write a letter to your instructor explaining the pattern.
2. Set up a reporting system for your organization, assuming that a monthly meeting is actually acting as a board of directors.
3. The city bus company operates as a public utility. Make a study of how the company reports to the city administration.

26

PERSONAL REPORTS

WHEN A MAN ACTS TO GET A JOB, HE PUTS TO WORK ALL THE REPORT writing methods and skills in the most intimate, personal, and earnest performance of his life.

REPORTS IN SELLING PERSONAL SERVICE

No man "gets a job"; he "sells" his services to someone who believes it will be profitable to "buy" them. Selling actually is the process of persuasively reporting information to a prospective employer to influence him to act, to say, "Yes, come along and join our team."

Selling one's self requires the same kind of systematic activity necessary to merchandise an automobile or a bottle of mouthwash. In every sales campaign, the salesman takes nine steps. He

1. **describes the product,** cataloging the benefits which it will provide to the buyer

2. **identifies the prospects,** cataloging people who ought to buy the product
3. **arranges a meeting** with the prospect, analyzing why such prospect should buy the product
4. **commands the attention** of the prospect, arousing interest
5. **asserts the benefits** which the prospect will enjoy when he possesses the product, thus stimulating desire
6. **proves the propositions asserted** by evidence, thus convincing the prospect
7. **answers objections,** thus overcoming the resistance of the prospect
8. **closes the meeting by getting the prospect to say** "yes," that he wants the benefits and will buy
9. **follows up,** if the sale is not completed, until the prospect says "yes" or the position has been filled.

DESCRIBING THE PRODUCT: ONE'S SELF

The first step in "reporting one's self" begins with a personal soul searching. A man asks himself: (1) What services have I to sell? (2) Why should an employer buy my services? (3) Where is the market?

At the beginning of "Operation Job," the reporter sits down and writes out an honest, objective description of himself as accurately as the definition of the shingle described on page 175. The man himself is the product.

WRITING THE POSITION BRIEF

A man selling his services generally reports himself for consideration for a specific job. This job requires specific competencies. Just as the man has first defined himself as a product, he next defines the job: What exactly is the position? What does the employer expect the man he hires to do? Then he lists the six most important competencies required of the job. From this point he measures himself for these requirements. He knows that the employer will hire the man whom he considers the "best buy on the market."

To answer why he is the "best buy on the market," the reporter writes a position brief like the one described on pages 351-352. The reporter says to himself: This position requires the following competencies. (List the six most important.) I offer the services which can best meet this need

because

because

WRITING OUT THE PRO-AND-CON MEMORANDUM

No one person possesses all the desirable qualifications. Every man has some strengths and some weaknesses; he possesses certain assets and certain liabilities. Therefore he proceeds to develop a pro-and-con memorandum of the kind described on page 350. In the "pro" column the reporter catalogs all the reasons why he should be employed. In the "con" column he lists all the reasons why he might not be employed. Thus

he has a comparative list of plus and minus factors. He frankly recognizes his liabilities and works out ways to overbalance each negative with a positive.

BUILDING THE PORTFOLIO: THE POSITIVE BRIEF

Having analyzed himself as a product and the employer as a market, the reporter builds his portfolio. The portfolio is really a position brief of the type discussed on pages 351-352. It is the sales argument. A portfolio is a documentary report designed to dramatize the services which a man can perform for the profit of the employer who hires him.

The portfolio is a brochure 8½" x 11" in size, with covers slightly larger, of soft cover stock. The pages should open flat. Each page in the portfolio should comprise a unit; it should tell a complete story. It should be identified by a cover label giving the name and address of the reporter in an attractive form. While the presentation must be original, factual, and salesworthy, the portfolio includes (1) a statement of its aim or purpose, (2) a conservative photograph, (3) a personal data sheet, (4) a personal history, (5) a discussion of experience, stated preferably in terms of the competencies required in the previous job, the problems he has faced, and the results he has accomplished, (6) references with titles, addresses, and telephone numbers, (7) specific statement of the reporter, the address and telephone number so that he can be promptly reached, (8) a conclusion. In the conclusion the reporter says in substance, "Now that's my story." The portfolio is a selling document.

The personal data sheet summarizes the essential facts. It gives the name, address, telephone number, age, height, weight, and marital status. The personal history statement tells about education and experience. Many excellent brochures deal functionally with experience in terms of "problems" and "results" or "what I found" and "what I did." Often the left-hand page states the problem; the right-hand page states the result.

In drafting the brochure the reporter seeks to produce a document with (1) maximum readability, (2) attention-holding interest, and (3) directness of appeal to the particular requirements and competencies demanded by the position.

Sidney and Mary Edlund, searching for the basic principles underlying vocational success and happiness, helped to organize the first Man Marketing Clinic, now operated by the Sales Executives Club of New York. They summarize the time-tested techniques of selling one's services in these nine propositions[1]:

1. Remember you have something to sell. Be specific about it.
2. Offer proof of what you can do. Be specific about it.

[1] Sidney and Mary Edlund, *Pick Your Job—and Land It* (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1954), p. 149.

3. Be specific about what you want; ask for a definite job.
4. Where possible, address your prospect by name.
5. Show an intelligent interest in the firm you are approaching.
6. Include all experience pertinent to the job you are after.
7. Include all personal data pertinent to the job you are after.
8. Close with an appeal to action.
9. In most cases save discussion of salary for the interview, or for final negotiations.

IDENTIFICATION OF PROSPECTIVE EMPLOYERS

So far the discussion in this chapter has assumed that the reporter has discovered the prospective employer to whom he is proceeding to sell his services. As a matter of fact, the identification of possible employers requires systematic research. To identify firms which may buy his services, the reporter develops a card file catalog. Many successful men keep this catalog current all through their careers as they watch for openings and pursue advancement.

The reporter compiles his prospect list on 3″ x 5″ cards with a data schedule like this:

Name of potential employer	Telephone
Address	extension
Name of person to see	
Office number and location	
Best time of day to call	
Personality characteristics of probable interviewer	
Interests of possible interviewer	
Persons who may be influential	

On the reverse side of the card the reporter keeps a record of all contacts and the dates set for follow-up.

Record of contact and follow-up

In pursuing his prospective employers, the reporter works on the list in the order of desirability of position and prospect of a job. He works hardest on the leads which he most wants and thinks he has the best chance of getting. He uses common sense in arranging his schedule of priorities and timing his approaches.

The catalog information about employers is developed from many sources, such as trade lists, industry yearbooks, advertisements, classified sections of the telephone directory, city directories, information supplied by chambers of commerce, research carried on in the public libraries, Dun & Bradstreet reports, information from friends, recommendations from employment agencies, from telephone calls, from cold calls (calls that do not follow leads or answer advertisements), and sometimes by advertising for a job.

When the reporter is fortunate enough to have a specific potential employer to address, he uses the same techniques in the interview which were discussed in "Writing the Position Brief." When a young man has the opportunities to choose among job offers, he can write a position brief on why he selects one employer in preference to another. He selects the job "because," and "because," and "because."

ARRANGING A MEETING

The development of a lead proceeds by arranging a meeting for a face-to-face interview. Every step in selling services looks forward to the moment when a man walks right through an office door to sit down and talk. The reporter wants to know when, where, and with whom he will meet. He achieves the appointment by a personal visit, by a telephone call, or by letter.

Letters fall into several classifications. They may be *invited applications*, *cold turkey letters*, or *shotgun letters*, and *rifle letters*. The latter two types are letters which prospect for job leads.

The invited application may result from an advertisement, from an announced interview, or from a previous meeting. In technique the reporter matches his qualifications to the requirements of the job in a letter which commands interest and strikes hard at the point. A cold turkey or shotgun letter is a sales approach to a prospect who has not requested a call. It is sent out to a number of possible employers in the hope that by the law of averages replies will be received. The "rifle" letter aims at a particular target. In all cases the letters must be drafted to command favorable attention and result in appropriate action.

A young man wanted to work in a bank. He addressed the following letter to the presidents of 100 banks.

Dear Mr. Morrow:

I want to work in your bank and make banking my career.

Start me at the bottom—anywhere. I'm accurate. I have always been an honor student in mathematics. In Elliott College I majored in banking and minored in accounting. I can type and use the adding machine.

For your convenience in telling me when you want me to meet with you, I enclose a self-addressed card.

The young man attached a data sheet.

Qualifications of Nelson Greening
to work in a bank

Ability: Accurate with figures and adding machine
Good typist
Working knowledge of bookkeeping
Knowledge of banking procedures

(Small, conservative photograph)

Experience: Two summers as diningroom cashier in Skytop Inn.
One year treasurer of Upsilon Psi fraternity.
Business manager of Paint and Powder Club, college dramatic society.

References:

Richard Coolidge
Manager, Skytop Inn
Arlington, Vermont
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James B. Elmore
Treasurer, Elliott College
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Cyrus A. Tuttle
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Education:

Graduate of Glens Falls (New York)
High School and Elliott College, with
specialization in banking and accounting.

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single; sport, tennis; hobby, collecting
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PREPARING FOR THE INTERVIEW: THE ORAL REPORT

Once an interview meeting has been scheduled, the reporter must prepare his oral presentation. He goes "prepared" to sell his services. The Edlunds say that the reporter should treat each interview "as though it's the last one" he will ever get. In advance he conducts research on the company and on the person who will interview him. He formulates his approach to appeal to his prospective employer's self-interest. He prepares convincing reasons why his services are "the best buy."

Sidney and Mary Edlund suggest these ways to turn interviews into offers:[2]

1. Have a clear picture of what the job calls for.
2. Gather all the facts you can about the firm and its products.
3. Draw up in advance an outline of the main points to be covered.
4. Appeal to the employer's self-interest. Offer a service or dramatize your interest.
5. Back up all statements of ability and achievement with proof.
6. Prepare some questions of your own in advance. Keep etched in mind the two-way character of the interview: mutual exploration.
7. Prepare for the questions normally asked.
8. Anticipate and work out your answers to major objections.
9. Close on a positive note.
10. Send a "thank you" note to *each* interviewer.
11. And follow up your best prospects.

BEHAVIOR DURING THE INTERVIEW

Fully important as adequate preparation for the oral reporting in the meeting is the impression communicated by the interview itself. R. E. Mason says that "many a capable man or woman has lost out on a fine job because of something that was (or was not) said or done during the interview."

From a long industrial experience Mason suggests some "Do's" and "Don't's" for interview behavior. He says an interview, if the reporter has his choice, should be scheduled after lunch when people are more relaxed and more agreeable. He should always be on time—never late, and rarely more than five or ten minutes early. Men should not offer to shake hands unless the interviewer offers his hand first. Do not sit down unless invited to do so. Accept an invitation with a friendly "thank you." Lean slightly forward to create the impression of being attentive. Don't smoke unless the interviewer starts to smoke and asks you to join him. Don't chew gum, fidget, or be restless with your hands. Dress conservatively, with clothes pressed and clean, shoes shined. Focus attention on the interviewer; he is the center of attention. Don't tell jokes or stories. Don't let your curious eyes rove over letters and papers on the interviewer's desk. Admire sensibly photographs on the interviewer's desk. Be a good listener. Answer questions fully, but briefly. Have all your facts at your fingertips. Remember that the interviewer is concerned with *what you can do!* Don't knock anybody or anything. Have a sound reason for having left your last position. Know when the interview is ended. Be alert and observe the interviewer's actions. Don't be afraid of leaving too soon. If the interviewer is sufficiently impressed, he will ask you to remain. Upon leaving, men should not shake

[2] *Ibid*, p. 277.

hands unless the interviewer offers to do so. Thank the interviewer for having asked you to call. Don't try to pin him down as to when you'll hear further about the job. Remember that a "thank you" letter plays an important part in helping you to sell yourself after the interview.

THE CONTINUING CONCERN FOR ADVANCEMENT

The process of "reporting one's self" continues right on through life for the man who is concerned with advancement. Sometimes accidents do open up opportunity, but for the majority of men promotion comes from a constant alertness. The finesse of "selling one's services" may change over the years, but the fundamentals remain the same. No matter how famous a man becomes, he must map out and execute a campaign to get the job he wants. For success in life every man needs to master the art of "reporting himself."[3]

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TRY YOUR HAND AT THESE •

- **to provide a systematic long-form report on a particular career**
- **to demonstrate use of the letter of transmittal**
- **to encourage the development of a portfolio**
- **to practice in letter writing**
- **to outline the art of selling one's services**

1. With an appropriate letter of transmittal, submit your long-form report on your career field.

[3] R. E. Mason, *How to Write Letters That Get Jobs* (Hollywood: Marcel Rodd Company, 1946).

2. Answer the following advertisement with a letter of application.

> **ACCOUNTANT**
>
> Who can speak, read and write French with the capacity to take full charge of Accounting Department for American firm in Paris, France, reporting only to top executive need apply. Must be willing to spend not less than five years in Paris. Write giving full record of experience and qualifications. Starting salary $7,500 per year.
> X 184 HERALD TRIBUNE

3. On the following form, assuming that you are the person prospecting for a job, draft a 35-word "Position Wanted" advertisement.

NOTICE WRITE ONLY ONE WORD IN EACH SPACE BELOW
IT WILL HELP US PRINT YOUR AD CORRECTLY
AD-TAKER WILL MAKE OUT ABOVE FORM, GIVING NECESSARY RECEIPT

FIRST WORD OF AD ________ ________ ________ ________ ________

________ ________ ________ ________ ________ ________

________ ________ ________ ________ ________ ________

________ ________ ________ ________ ________ ________

________ ________ ________ ________ ________ ________

SAVE MONEY ON THIS AD! Ask about SPECIAL RATES.

4. Develop a portfolio for the presentation of your own qualifications to an employer. Then draft a letter designed to set up an appointment for an interview.
5. A friend asks you to give him advice on how to prepare for an interview and how to act during the meeting. Write him a letter giving the advice.
6. Write a "shotgun letter" in which you prospect for job leads.
7. Write a "rifle letter" in which you seek an interview for a particular job.
8. Prepare an oral report in anticipation of a job interview.
9. Write a "thank you" letter to an interviewer after a meeting.
10. Become familiar with books on applying for jobs; e.g., *Pick Your Job and Land It!* by Sidney and Mary Edlund and *How to Write Letters that Get Jobs* by R. E. Mason. Then draft a "shotgun" letter to blanket the field in which you propose to find an opening.
11. Prepare your own data sheet to keep in your pocket, in case you have a sudden request for it.
12. Assume that you are one of ten men being considered for a position. You have been interviewed and have submitted information about yourself. Plan a follow-up campaign to bring a close in your favor.

APPENDIX I

THE REPORTING OF ACCOUNTANTS

BECAUSE MODERN LIFE REQUIRES BUSINESS RECORDS FOR ITS DIRECTION, THE accountant has become a part of the team of top management. His reports contain the "hard facts" describing whether operations are in the black or in the red. The skill of the accountant in presenting his material, however, has not kept pace with the enormous growth in the importance of the profession. Both among accountants themselves and the people who read their writing there is a widespread movement to improve accountants' reports. Accounting reports stand as a tool of first importance in a kind of world where size and complexity compel men to think in figures—and especially figures which describe profit and loss.

During the last half-century, development in industry and politics has led to conditions which have enormously increased the need for and the usefulness of account reporting. Among the milestones in accounting history since 1900 have been

1. the movement toward consolidation and merger in industry
2. the beginning of government regulation in accounting in 1907
3. the growth of accounting with high taxation during World War I and the shift in emphasis from the balance sheet to the income statement
4. the adoption by the New York Stock Exchange of standards of accounting disclosure in 1932 and its further development by the Securities Act
5. the necessity in World War II for accounting skill in the preparation of research bulletins, cost inspection, repricing, price-fixing, and renegotiation
6. the developments since World War II, particularly those due to inflation and the growth of the importance of organized labor and the farmer
7. the demands of management for analytical and control reports within the firm

ACCOUNTING REPORTS SHAPED TO NEEDS AND PURPOSES OF READER

Despite the fact that hours and months of labor go into the preparation of an accountant's report, nine-tenths of what management or a client sees is *the report document.* This contains the pages he studies. It becomes the source on which he relies for indisputable facts to guide him. The report tells a manager or a client most of what he knows about accountants.

As the accountant has become more necessary to industry, he has been called upon to write more reports and a greater variety of types of reports. These reports require the capacity to understand problems, to select reliable figures which describe those problems, and to present the results of an inquiry in clear statement. Once the accountant could complete his work with a *short-form report* containing a statement and a certificate. To this was added the *long-form report.* This document adds detailed explanations to the schedules and analyzes problems for management and boards of directors. To the short-form and the long-form reports have been added *special purpose reports.* These documents deal with problems such as investigations of discrepancies, recommendations of accounting systems, and tax reports going into historical analysis. The increasing demand for accounting reports for legal purposes led to studies dealing with subjects such as trust agreements, estate settlements, and other operations where the controlling instrument is a legal document which must be complied with. As industry grew bigger, accountants were expected to produce *reports for merger purposes* in which it was necessary to establish the accounts of two or more companies on the same basis. Accountants had to write *valuation reports, reports for share holders, reports for credit purposes, and operating reports for management.*

NEED FOR REPORTING SKILL

The accountant found himself in a position where, although trained in figures, he had to write reports in words based on those figures. He had to know *how to think and to write,* both in terms of a particular problem of reference. He had to be clear, exact, and concise. He had to make his statements speak facts, to present his data with *firmness and tact,* and to support his statements by indisputable data which could be used as evidence in court. In short, his reports had to be written so that they could not be misunderstood and could not be questioned as to fact.

Despite the new and urgent need for verbal skill in preparing reports to meet the demands placed on the accounting profession, it became plain that accountants to a large extent had "frozen" their style in a pattern of "rubber-stamp" expressions. The *Journal of Accountancy* observes that the most persistent criticism of accountants is that they write badly and that their reports are complicated, obscure, and tiresome. Bankers and credit

men have a standing joke: Accounting reports to clients, they say, are identical in every respect from year to year, with one exception—a change in the figures.

At the same time that the accountant was required to write more reports and more kinds of reports, he was more frequently called into conference to *discuss problems orally*. Spoken reporting thus became more important.

COMMON REPORT FAULTS

As the accounting profession dug into its reporting problem, it found that the common faults in accounting reports included

1. *Lack of organization*
   a. resulting from absence of logical sequence in the text
   b. resulting from failure to accept the point of view of those for whom the report is intended
2. *Failure to engage the readers' interest*
   a. resulting from failure to state the salient findings at the beginning, to invite attention to the explanations which follow
   b. resulting from failure to break up the text with topical captions
3. *Incompleteness of material*
   a. resulting from omission of essential material points because of inadequacy of the examination, faulty report planning, or a perfunctory attitude in the preparation of the report
   b. resulting from failure to give the reader the information to which he is entitled
4. *Poor composition resulting from*
   a. undue stress on matters of little relative importance
   b. uncertainty in expression
   c. inexactness of expression
   d. lack of variety in vocabulary
   e. poor sentence structure

The concern for improved writing in reports has done much to encourage accountants to prepare more attractive presentations.

OBJECTIVE WRITING AND STYLE

Because an accountant is a "fact man," he has to be explicit in the use of language. His writing and his oral discussion must be uncolored, unslanted, and without assumption or inference. These requirements limit an accountant's literary freedom but compel him to develop a style which can rise to heights of simple, factual eloquence.

DEVELOPMENT OF PERSONAL STYLE

An accountant can develop literary style. An outstanding example is the work of the late William E. Seatree. Following the failure of the Kreuger

& Toll match dynasty, Seatree wrote a report of international importance. Accountants examined the records of the firm extending over fourteen years. During the final summer and fall more than thirty staff members were at work analyzing the transactions of more than 150 subsidiary companies. The report of the examination was read in the second chamber of the Swedish Riksdag just before midnight. It confirmed the fact that the balance sheets of Kreuger & Toll "grossly misrepresented the true financial position of the company."

Seatree ended his report with language which continues to be an accounting classic because of the organization of the thought and the conciseness in his use of words. He wrote:

In concluding this Report we propose to deal briefly with three questions of general interest, namely:

(1) Where has the money gone which the public subscribed?
(2) To what extent were reported earnings real?
(3) How early did Kreuger's irregularities begin and what enabled them to be concealed?

To answer the first question it is necessary to deal with the combined position of the five principal companies taken collectively, i.e., the three which sought money from the Public on a large scale. . . .

Turning to the second question, our examination has disclosed that during the same period of 14¼ years the apparent reported Earning and Income of these Companies combined in the aggregate were grossly overstated. . . .

With regard to the third question, we have already indicated that the manipulation of accounts goes back at least as far as 1917. The fraudulent practices assumed large proportions in 1923 and 1924 and continued thereafter, culminating in the fabrication of L 21.000.000 (nominal) of Italian Government Bonds.

The perpetuation of frauds on so large a scale and over so long a period would have been impossible but for (1) the confidence which Kreuger succeeded in inspiring, (2) the acceptance of his claim that complete secrecy in relation to vitally important transactions was essential to the success of his projects, (3) the autocratic powers which were conferred upon him, and (4) the loyalty and unquestioning obedience of officials, who were evidently selected with great care (some for their ability and honesty, others for their weaknesses), having regard to the parts which Kreuger intended them to take in the execution of his plans. . . .

The history of this Group of Companies emphasizes anew the truth that enterprises in which a complete secrecy on the part of the chief executive officer as to the way in which important parts of the Capital are employed is, or is alleged to be, essential to success are fundamentally unsuited for public investment, since such secrecy undermines all ordinary safeguards and affords to the *dishonest* executive unequalled opportunities for the perpetration and concealment of frauds.

WHY ACCOUNTANTS FAIL TO MAKE CLEAR STATEMENT

A report editor, Laura Hunter, of the General Accounting Office made notes on reports submitted to her. She found that one difficulty in accounting narrative lay in the use of words. Accountants relied too much on stereotyped expressions and were often inexact in word usage. To point out how accountants could write better reports, she cataloged her materials as a series of suggestions for improvement. Her comments emphasize the general principles of good reporting which have been discussed throughout this book. It is clear that the *principles* of orderly thinking and clear statement apply generally in *all* forms of reporting.

Here are some of this editor's warnings.[1] She says in substance:

1. *Locate words in a sentence in their logical sequence.*
   Not "Benefits to farmers *rendered by the Corporation*"
   but "Benefits *rendered to farmers* by the Corporation"
2. *Choose a strong subject.*
   Not "*It* should be made clear in organic legislation"
   but "*Organic legislation* should make clear"
3. *Make statements in positive language.*
   Not "*We do not believe* that the Corporation's records can be relied upon"
   but "*We believe* that the Corporation's records cannot be relied on"
4. *Avoid using the same word in two senses in a sentence.*
   Not "As a *result* of this grouping of program *results*. . . ."
5. *Do not violate parallelism.*
   Not "insuring, transferring, and reconcentration of"
   but "insuring, transferring, and reconcentrating"
6. *Do not be afraid to repeat words when they aid clear statement.*
   Not "The business manager of the field party usually acts *in the same capacity* for the servicio"
   but "The business manager of the field party usually acts *as business manager* for the servicio"
7. *Do not hold your reader's "mind in abeyance through a series of subordinate clauses" or hold the predicate in reserve "until the subject has passed out of mind."*
8. *Do not split prepositional phrases.*
   Not "Loans discounted with, or made directly by, the banks"
   but "Loans discounted with the banks or made directly by them"
9. *Do not split infinitives unless they make language stronger and are more natural.*
10. *Avoid the passive voice.*
    Not "It is believed by corporation officials"
    but "Corporation officials believe"
11. *Prefer the simple word.*
    Not "Changes were *effected*"
    but "Changes were *made*"

[1] Laura Grace Hunter, *The Language of Audit Reports* (Washington: General Accounting Office).

12. *Avoid jargon.*
    Not "The net receipts after certain deductions *are made therefrom*"
    but "The net receipts after certain deductions . . ."
13. *Avoid lingo words.*
    Not "Payments *of a similar nature*"
    but "*Similar* payments"
14. *Do not make nouns out of verbs that should be verbs.*
    Not "Cancellation of the notes was effected"
    but "The notes were cancelled"
15. *Be careful not to dangle modifiers.*
    Not "*Upon organization,* RFC became the fiscal agent of the Corporation"
    but "When the Corporation was organized, RFC became its fiscal agent"
16. *Do not confuse singulars and plurals.*
    Not "data shows"
    but "data show"
17. *Do not overwork* AND.
    Not "These changes had not been made at June 30, and additional comments follow"
    but "These changes had not been made at June 30. Additional comments follow"
18. *Be careful not to mislocate* ONLY *and* ALSO.
    Not "Each of the men drew *only* his salary as director"
    but "Each of the men drew his salary *only* as director"
19. *Do not abuse* WHICH.
    Not "Annual savings of about $1100 in *expenses, which* would allow . . ."
    but "The economy resulted in annual savings of about $1100 in expenses. Such *savings* would allow for . . ."
20. *Do not misuse* WITH.
    Not "Many accounts were delinquent, *with* no effort made to collect them"
    but "Many accounts were delinquent, *but* no efforts were being made to collect them"

PLANNING ACCOUNTANTS REPORTS

A good accounting report, like every other type of report, requires hard thinking and careful planning. In building his plan, an accountant relies upon the outline. When the report has been properly designed, its writing becomes orderly and the presentation attractive. Because accounting firms insist that reports be dictated to save time, the writer must give even more attention to his planning than if he were writing his narrative in longhand or pounding it out on his typewriter.

In building an outline the accountant needs to keep foremost

1. the viewpoint and requirements of the reader
2. the orderly exposition of the subject
3. the objective of stimulating the reader's interest

When an accountant becomes "report conscious," he begins to collect different kinds of presentations. His junior work is performed in the preparation of short- and long-form reports based on examination of records, but his most important assignments as he matures will be on problems which require special kinds of reports. If he studies the reports of outstanding men in his profession, he will develop a grasp of method, style, and attack.

WORDS EASILY CONFUSED

Accountants have a tendency to confuse certain words which have the same general sound but which have entirely different meanings. A leading organization of public accountants has compiled a list of some of these words for the guidance of its men:

above, above-mentioned, above-named, used as a noun—INCORRECT; used as an adjective, while not incorrect, is less desirable than *the foregoing* or *the preceding*

accept, to take or receive with approval
except, to omit

adverse, opposed; acting against
averse, unwilling; reluctant

advice, opinion offered
advise, to counsel

affect, to influence
effect, (noun) that which is produced; (verb) to complete; to carry out

air mail, (noun)
air-mail, (adjective)

all right, (there is no such word as *alright*)
already, by this time; before
all ready, all prepared

anyone, any person, indiscriminately
any one, any single person or thing

altogether, wholly—completely
all together, in one group

assigner, one who assigns or makes an assignment
assignor, (law) an assigner; a person who makes an assignment

assistance, help; aid
assistants, helpers

beside (as preposition) at or by the side of; *beside the point* is idiomatic
besides (as adverb) moreover; in addition to (as preposition) over and above; in addition to; other than

biannual, occurring twice a year
biennial, happening once in two years

breakdown (noun)
break down (verb)

canvas, coarse, heavy cloth
canvass, close inspection or examination

capital, principal city; foremost; wealth used in production
capitol, the building in which a state legislature meets; building which houses Congress in Washington, D. C.

carry-back (noun)
carry back (verb)

carry-over (noun)
carry over (verb)

complement, that which completes a whole
compliment, commendation

consul, a representative of the commercial interest of citizens in a foreign country
council, a legislative or administrative assembly
counsel, advice; one who is consulted for advice (usually legal)

continual, occurring in close succession
continuous, without cessation

credible, believable
creditable, deserving or possessing reputation
credulous, inclined to belief on slight evidence

cross-refer, to refer across from one place to another
cross reference, a reference made from one part of a book, index, etc. to another part
cross-reference, to enter the name of in cross references

customers (when a word is considered more descriptive than possessive the apostrophe is not used): *customers accounts; customers' advances; customers invoices; customers' deposits*

customhouse
Custom House (New York)

disburse, to pay out
disperse, to separate; to scatter

each other, refers to only two
one another, refers to more than two

emanate, to originate; to issue from a source
eminent, prominent; lofty
immanent, operating within; actually present in
imminent, impending; threatening to occur at once

emigrate, to go from one place to another to live
immigrate, to come from one place to another to live

equable, uniform; even
equitable, fair; just

everyone, all persons, collectively
every one, each thing or person without exception

except, with the exception or exclusion of
accept, to receive

farther, at a greater physical distance; more remote in space
further, moreover; in addition; refers to progression of mind in the development of an idea

follow-up (noun)
follow up (verb)

formally, with dignity; ceremoniously
formerly, before; up to now

guarantee, to warrant the performance of; to secure. A warrant of soundness, reliability or genuineness
guaranty, a financial security; a surety (Some writers do not differentiate between these words as nouns, and use *guarantee* in all instances. *Guarantee* is the verb always.)

in, place in which; static concept
into, motion into; dynamic concept

incidents, occurrences
incidence, a falling upon; an angle; occurrence as "the incidence of a disease"

ingenious, clever; inventive; resourceful (noun, *ingenuity*)
ingenuous, candid; artlessly frank (noun, *ingenuousness*)

interstate, between two or more states
intrastate, within one state

irruption, a bursting in
eruption, a bursting out

its, possessive of *it* (no apostrophe)
it's, contraction of *it is*

jam, to crowd; to cause to become wedged
jamb, a part of a door

key, that which controls or unlocks
quay [also pronounced kē] a landing place or wharf

later, at a subsequent time
latter, the second-mentioned; the last, as "the latter part of the year"

lean, to incline; thin
lien, a legal claim

led, did lead
lead, a heavy metallic element

lessen, to diminish
lesson, a teaching

long term (noun)
long-term (adj.) *long-term debt*

lose, to part with unintentionally
loose, not restrained; unfastened

markdown (noun)
mark down (verb)

markup (noun)
mark up (verb)

miner, one who mines
minor, smaller; a person under age

moral, pertaining to right conduct; a lesson
morale, state of mind; spirit or feeling, as a body of people

naught, zero; a cipher
nought, nothing

nobody, no one (interchangeable)
none, no one or not one, singular; not any, plural (*all, any, more, most, none, some, that, who, which*—these words may stand as singular or plural subjects, according to the sense of the sentence, and the verb should agree)

one half (noun—this applies to the writing of all fractions)
one-half (adj.)

ordinance, a law
ordnance, military ammunition and supplies

out-of-pocket (unit modifier)
out-of-town (unit modifier)

overall (noun) an outer garment for rough wear
over-all (adj.) including everything, taking everything into account

paid in
paid-in (adj.)

part time
part-time (adj.)

past, pertaining to time gone by
passed, gone beyond; passed an examination

peace, calm, content, harmony
piece, to put together; a portion; a short composition

per cent, number of parts to 100
percentage, relationship of a part to the whole of 100 parts

personal, individual; private
personnel, the persons engaged in a certain service; staff

practice (noun) performance
practice (verb) do
practise (verb) to perform

precede, to go before
proceed, to advance; (noun) procedure

precedence, priority
precedents, established rules

principal (adj.) chief; main; (noun) a capital sum; the most important
principle (noun) a rule of conduct; a general truth; inherent character

realty, real estate
reality, that which is real

receipt, an acknowledgment of things received
recipe, a formula for ingredients

residence, a dwelling
residents, those who reside in a place

respectfully, with respect
respectively, each to each in the order designated

safe deposit (both used, but the first is preferable)
safety deposit
safe-deposit box

set up
setup (noun)

short term
short-term (adj.)

shut down
shutdown (noun or adj.)

six-month period

sometime, at an indefinite time, as *it may happen sometime*
some time, a period of time, as *some time ago*
sometimes, now and then

stationary, in fixed condition
stationery, writing materials

toward, towards (interchangeable prepositions)

trade in
trade-in (noun or adj.)

up to date
up-to-date (unit modifier)

usable, workable
useful, full of use

vender, one who vends
vendor (law) the seller (opposite of vendee)

week end
week-end (adj.)

wholly owned
wholly-owned (adj.)

write up
write-up (noun)

year end
year-end (adj.)

WORDS OFTEN MISSPELLED BY ACCOUNTANTS

Accountants tend to confuse some words or misspell certain words which recur in their writing; for example:

acceptable	accommodate	acknowledge
accessible	accumulate	acknowledgment

adviser
advisor
advisory
afore-mentioned
aforenamed
aforesaid
allocable
aging
allotment
allotted
amortization
amortize
analogous
analysis
analyze
ancillary
antitrust
appraisal
bankbook
bimonthly
biweekly
bondholder
bylaw
by-pass
by-product
calendar
cannot
checks*
cheques
checkbook
check list
check mark
consummate
control
controlled
cooperate*
co-operate
co-owner
copartnership
crossfoot
daywork
depository*
depositary
dead line
development
excess-profits tax
federal
fiduciary
footnote
goodwill*
good will
handwritten
handwriting
hand-posted
inasmuch
in so far*
insofar
inadvertent
interoffice
intercompany
inventory taking
judgment
last-in first-out
LIFO
lawsuit
letterhead
livestock
man-day
man-hour
man power
moneys*
monies
newspaper
newsprint
newsstand
nonessential
non-interest-bearing notes
nonoperating
nontaxable
occur
occurred
occurrence
offset
omissible
omission
omit
omitted
outdated
outmoded
overemphasize
payroll*
pay roll
permissible
postwar
prewar
pro forma
pro rata
prorate
pursuant
re-enter
re-establish
reorder
re-use
safekeeping
self-insurance
semiannual
showdown
showroom
stockhouse
stockkeeper
stock ledger
stock list
stock room
storehouse
storekeeper
storeroom
subcommittee
subcontract
superseded
tax-free
test check
test count
time book
time clock
timecard
time sheet
time study
timetable
trade-mark*
trademark
trade name
transmittal
underwriter
war savings
wartime
workday
workroom
work sheet
workshop
work week
yearbook

* preferred spelling

APPENDIX II

COURSE SYLLABUS

THE MATERIALS IN THIS TEXT PROVIDE THE INSTRUCTOR WITH THE OPPORtunity to shape a course syllabus to meet his own particular teaching purposes; hence, the volume is planned to provide more for flexibility than for a chapter by chapter study sequence.

In planning a syllabus the instructor will find it most advantageous to discover the needs, strengths, and weaknesses of his class. Then he can place the emphasis in an order of priorities determined by the basic needs of his students as well as the announced purposes of the course.

Since report writing instruction, to be most effective, must be highly individualized, the instructor will find it helpful early in the calendar to administer, either as a class project or as a voluntary privilege, a series of diagnostic tests. These should include (1) a test or tests which measure reading comprehension, mechanics of expression, and effectiveness of expression; (2) a vocabulary profile test; (3) a listening comprehension test; (4) a speech profile test; and (5) a participation profile developed from observation of the student's performances in group activities.

In some institutions, an instructor may be able to obtain much of this information from records of tests which his students have already taken. When Irving Babbitt was teaching at Harvard University, he spent hours in the university records office to inform himself about his students, their capabilities, and their needs.

As a suggestion of a possible pattern for a general course in report writing, the following syllabus gives a program for a three-hour, one-semester course.

SUGGESTED COURSE OUTLINE

A course carrying three hours of academic credit generally meets in at least 45 class sessions of 50 minutes each, or the equivalent. This course outline suggests a pattern for such a schedule.

SESSION 1. OVERVIEW OF THE COURSE

A. Orientation to the text

1. Three parts tied together by the problems
2. Value of cumulative loose-leaf notebook as the student's record of his development and as a handbook for continuing use
3. Performance requirements
    a. short exercises for each class session
    b. one long-form report on a career subject to be completed during the course
    c. at least one major additional project in the form of a research report, chosen by the student because of his special interest or because it is a part of a total report operation carried on by the class as a whole

B. Brief discussion of how the daily paper reports weather news; indication of what the student should look for in performing the problem assigned for the next session

C. *Study assignment:* chapters 1, 4, and the section in Chapter 24 on the think memorandum; become familiar with the little book on library reserve by G. E. Williams, *Technical Literature: Its Preparation and Presentation*

D. *Work assignment:* either Problem 1 or 2 at the end of Chapter 1 and Problem 3

SESSION 2. INTRODUCTION OF PRINCIPLES OF CLEAR STATEMENT

A. Class discussion of the principles of clear statement

1. Attention to the reports prepared on weather news and the editorial practices of the *United States News and World Report*
2. Chalkboard inventory of fundamentals of clear statement

B. *Study assignment:* chapters 9 and 15; become familiar with the following two books on library reserve:

Plain Words by Sir Ernest Gowers
Language Habits in Human Affairs by Irving T. Lee

These books on library reserve are resource material in preparing the work assignment:

The Technique of Reading by Horace Judson
How to Read Better and Faster by Norman Lewis
Reading Improvement by Paul Witty
Reader's Digest, educational edition

C. *Work assignment:* Problem 3 at the end of Chapter 9; write the memorandum suggested as Problem 1 at the end of Chapter 4

SESSION 3. SENSITIVITY TO WORDS

A. Class discussion

1. Many meanings of the word "case"
2. The distinction between the denotation and connotation of words

3. The Blake letter and its revision
4. Plus and minus words
5. The student performance on Figure 13.1
6. Semantic concepts
7. Special attention to text section on "indexing" and "orientation"
8. Speech levels and tone
9. Use of plain words; elimination of clichés

B. *Study assignment:* chapters 10 and 19

C. *Work assignment:* Problem 1 at the end of Chapter 10

SESSION 4. LONG-FORM CAREER REPORT PLANNING

A. Class discussion of the long-form report pattern

1. Classification of career project
2. Personal importance of the career project

B. *Study assignment:* Chapter 11; skim Chapter 2

C. *Work assignment:* Problem 1 at the end of Chapter 11

SESSION 5. THE PARAGRAPH AS A THOUGHT UNIT

A. Class discussion of the paragraph

1. Paragraph units of work assignment read orally by several students
2. Discussion of types of report paragraphs

B. *Study assignment:* Chapter 12; become familiar with G. V. Carey's *Mind the Stop*

C. *Work assignment:* the two problems at the end of Chapter 12

SESSION 6. THE IMPORTANCE OF PUNCTUATION IN CLEAR STATEMENT

A. Class discussion of punctuation problems

1. Inventory of problems met in the work assignment
2. Oral consideration of work assignment

B. *Study assignment:* Chapter 2, to "The Collection of Information."

C. *Work assignment:* problems 1 and 2 or 3 at the end of Chapter 2

SESSION 7. INTRODUCTION TO REPORT METHOD

A. Class discussion

1. Three phases of the reporting process
2. Statement of the problem
3. Methods of note-taking and note-filing

B. *Study assignment:* Chapter 2, beginning with "The Collection of Information" and continuing to "The Working Outline"

C. *Work assignment:* Submit to the instructor a plan for making the study suggested in Problem 7 at the end of Chapter 2

SESSION 8. GATHERING INFORMATION

A. Class discussion based on work assignment submitted

B. *Study assignment:* Chapter 2 beginning with "The Working Outline" and completing the chapter

C. *Work assignment:* Problem 3 at the end of Chapter 2; continue work on Problem 7

SESSION 9. MASTERING THE OUTLINE

A. Class discussion of the outline

   1. Decision of kind of outline student proposes to use
   2. Relation of outline code to note system

B. *Study assignment:* review Chapter 2; become familiar with the book by Stanley Payne, "The Art of Asking Questions"

C. *Work assignment:* Problem 5 at the end of Chapter 2; continue work on Problem 7

SESSION 10. REVIEW

A. General discussion review of Chapter 2

B. *Study assignment:* Chapter 3

C. *Work assignment:* complete report based on Problem 7; submission at the next session of the class

SESSION 11. CONSIDERATION OF PRODUCT FORECAST REPORT

A. Class discussion of problems encountered in preparing the report

B. *Study assignment:* Chapter 5

C. *Work assignment:* Problem 1 at the end of Chapter 3

SESSION 12. TABULAR PRESENTATION

A. Class discussion of the structure of tables and their use in report communication

B. *Study assignment:* Chapter 6 to "Types of Charts"

C. *Work assignment:* Problem 1 and one other selected from the schedule problem at the end of Chapter 5

SESSION 13. GRAPHIC PRESENTATION

A. Class discussion of the structure of charts and their use in report communication

B. *Study assignment:* Chapter 6, from "Types of Charts" to "Pictures in Reports"; become familiar with the book on library reserve by Daniel Mich and Edward Eberman, *The Technique of the Picture Story*

C. *Work assignment:* problems 1 and 2 at the end of Chapter 6

SESSION 14. PICTORIAL PRESENTATION

A. Class discussion of the use of pictures in reports and overview of chart slide

B. *Study assignment:* Chapter 6, from "Pictures in Reports" to the end of the chapter

C. *Work assignment:* Problem 6 at the end of Chapter 6

SESSION 15. REVIEW

A. Discussion of tables and charts

B. *Study assignment:* Chapter 7; become familiar with the following two books on library reserve: *The Technique of Clear Writing* by Robert Gunning and *How to Test Readability* by Rudolf Flesch

C. *Work assignment:* Problem 2 at the end of Chapter 7

SESSION 16. READABILITY BY FORMULAS

A. Class discussion of the Flesch and Gunning formulas

B. *Study assignment:* Chapter 8

C. *Work assignment:* Problem 1 at the end of Chapter 8

SESSION 17. REVIEW OF FUNDAMENTALS

A. General review of Part One and Part Two of the text

B. *Study assignment:* thorough review of Chapter 2

C. *Work assignment:* submit a completed "Report Writer's Planning Worksheet" summarizing your program for writing the long-form report on your career field

SESSION 18. REVIEW OF FUNDAMENTALS

A. General review of Part One and Part Two continued

B. *Study assignment:* Chapter 13

C. *Work assignment:* submit a completed "Report Writer's Planning Worksheet" summarizing your program for writing the research report

SESSION 19. ORAL REPORTING

A. Speech demonstration

1. Instructor leads the class in exercises in Chapter 13
2. Each student in turn, following the exercise, reads a passage from the text, beginning with the practice sentences on pages 209-210. While one student reads, the other students evaluate his performance on the speech profile at the end of Chapter 13.
3. At the conclusion of each reading, one designated student gives an oral critique of the performance

B. *Study assignment:* review Chapter 13, beginning with "Conferences"; read Chapter 14

C. *Work assignment:* Problem 6 at the end of Chapter 14. Collect and bring to class for discussion in the letter clinic three typewritten letters, one of which must run to a second page in length

SESSION 20. LETTERS IN THE REPORT PROCESS

A. Briefing conference on letters
   1. Four letter formats (*5 minutes*)
      a. Pure block
      b. Modified block
      c. Indented
      d. Hanging paragraph
   2. Six major qualities of good letters (*10 minutes*)
   3. Salesmanship in every letter (*5 minutes*)
   4. Letter clinic (*30 minutes*)

B. *Study assignment:* Chapters 15 and 16

C. *Work assignment:* Problem 1 at the end of Chapter 15 and Problem 1 at the end of Chapter 16. Obtain an appraisal report of a stock from a local broker. On the basis of the data given in it, write a letter to a client advising either the purchase or nonpurchase of the stock. Give your reasons

SESSION 21. CREDIT REPORTS

A. Credit report analysis:
   1. Discussion of the synopsis given in Figure 16.4

B. *Study assignment:* Chapter 17

C. *Work assignment:* Problem 4, Chapter 15. Submit a dummy form to show the format of the research report you are writing. Submit final outline of your research report

SESSION 22. RESEARCH REPORT

A. Class discussion of the General Motors Research Report
   1. Analysis of the model
   2. Exhibit and discussion of dummy reports submitted by students

B. *Study assignment:* Chapter 18

C. *Work assignment:* Submit the outline of the long-form career report you are writing. Attach to it a hypothetical letter of authorization and your acceptance of the project

SESSION 23. CAREER REPORT

A. Discussion of the career reports

B. *Study assignment:* Chapter 19

C. *Work assignment:* Prepare a ten-minute talk to be delivered before the class. Incorporate in your presentation the suggestions for good delivery made in Chapter 19. Use any topic, but in lieu of a preference, report orally on your career field

SESSION 24. ORAL REPORTING

A. Oral reports and critiques

B. *Study assignment:* Chapter 20; section on memorandum in Chapter 15

C. *Work assignment:* Prepare a staff study providing for a University Career Day at which your class will have its reports and information sheets on exhibit and be present for personal counseling with students

SESSION 25. ORAL REPORTING

A. Discussion of staff study reports on University Career Day—oral presentations

B. *Study assignment:* Chapter 21

C. *Work assignment:* Write a letter to your instructor telling him that you propose for the remainder of the semester to follow the course of a certain bill introduced into Congress and that with the guidance of Phillips' *Operation: Congress* you are going to develop a completely documented legislative history of this bill. You will submit this material toward the end of the term

SESSION 26. LONG FORM REPORT

A. Oral Progress Report session on Long-Form and Research Reports

B. *Study assignment:* review Chapter 21

C. *Work assignment:* Write a newspaper release announcing the Career Day being sponsored by your class

SESSION 27. CAREER DISCUSSION SESSION

A. Class discussion on organization of Career Day—attention to clear-cut formulation of motions

B. *Study assignment:* collect three types of fact books to show (1) reference use, (2) industry story, and (3) report to influence

C. *Work assignment:* draft a newspaper release giving facts about the career field of your long-form report interest

SESSION 28. PUBLIC REPORTS

A. Class discussion of fact books

B. *Study assignment:* review Chapter 21; collect and bring to next class three annual reports

C. *Work assignment:* prepare a one-page fact sheet descriptive of the college or university which you attend

SESSION 29. ANNUAL REPORTS

A. Class discussion of annual reports

B. *Study assignment:* critical analysis of the three annual reports collected

C. *Work assignment:* obtain a copy of the president's annual report of your college or university. From information contained in it, prepare what you believe would be a model report

SESSION 30. REVIEW

A. Review and general discussion

B. *Study assignment:* review chapters 13–23

C. *Work assignment:* continue work on long-form and research reports. Research report due at Session 38

SESSION 31. ORGANIZATIONAL REPORTS

A. Lecture on organizational communication
   1. Nature of organization
   2. Role of communication

B. *Study assignment:* Chapter 23. Become familiar with the following books on library reserve: *Communication in Management* by Charles E. Redfield; *Oral Communication in Business* by David C. Phillips; *Human Relations in Modern Industry* by R. F. Fredgold; *Communication within Industry* by Raymond W. Peters; and *Effective Communication in Industry* by Paul Pigors

C. *Work assignment:* draft for faculty consideration a university policy statement which defines the student's right to have his own automobile

SESSION 32. POLICY STATEMENTS

A. Class discussion of development of policy statements on department store topics given on page 325

B. *Study assignment:* become familiar with *Managerial Control of Business* edited by George T. Trundle, Jr.

C. *Work assignment:* draft a chart of the class organization for conducting the career day

SESSION 33. ORGANIZATIONAL WRITING

A. Lecture on job specification and standard practice procedure

B. *Study assignment:* review of pages 309-331

C. *Work assignment:* with attention to your organizational chart, write a job specification for the class members in charge of exhibits at Career Day

SESSION 34. CAREER DAY DISCUSSION

A. General discussion of organization for Career Day

B. *Study assignment:* review of Chapter 23

C. *Work assignment:* draft job specifications and standard practice procedures, as assigned in the class discussion, for incorporation in a Career Day organizational manual

SESSION 35. ORGANIZATIONAL MANUAL

A. General discussion of organizational manual

B. *Study assignment:* Chapter 24

C. *Work assignment:* complete writings for the Career Day organizational manual

SESSION 36. DECISION-MAKING

A. Lecture on decision making

B. *Study assignment:* become familiar with the following books on library reserve: *Creative Thinking and How to Develop It* by William H. Easton and *How to Think in Business* by Matthew T. McClure

C. *Work assignment:* write a précis based on Easton's *Creative Thinking and How to Develop It*

SESSION 37. THINKING IN BUSINESS

A. Discussion of thinking in business

B. *Study assignment:* review of Chapter 24

C. *Work assignment:* as the proprietor of an established high quality store, you are considering the discontinuance of home delivery. Write a pro and con memorandum on the subject

SESSION 38. ORAL SUMMARIES OF RESEARCH REPORTS

A. Research reports submitted: scheduling of two five-minute oral reports at each of the remaining sessions in the course

B. *Study assignment:* become familiar with the book on library reserve by H. G. Schnackel, *The Art of Business Reasoning*

C. *Work assignment:* your local merchant's association is considering closing stores on Monday nights and opening them on Saturday nights. Write a position brief in support of one of the nights

SESSION 39. CASE BRIEF

A. Oral research reports (*10 minutes*)

B. *Study assignment:* Chapter 25; become familiar with the book on library reserve by Walter Dill Scott, *Influencing Men in Business*

C. *Work assignment:* the Merchant's Association seems to be developing sentiment for opening on a night which you oppose. You believe your position is sound. Prepare a case brief for arguing your point at the Merchant's Association meeting

SESSION 40. EXECUTIVE REPORTS

A. Oral research reports (*10 minutes*). Lecture on executive reports

B. *Study assignment:* Chapter 26

C. *Work assignment:* write a letter to an associate explaining the report principle of information at action points

SESSION 41. PLANNING CAREER BRIEFING SESSION

A. Oral research reports (*10 minutes*). Long-form career reports submitted

B. *Study assignment:* general review

C. *Work assignment:* prepare assignment for career briefing session. The outline of the oral presentation is this:

Minutes	
10	I. Determine what you want to do
5	A. Find out what the field of work requires
5	B. Dig out your hidden assets for such work
20	II. Prepare your sales presentation
5	A. Follow these principles
3	1. Offer a service instead of asking for a job
2	2. Appeal to the self-interest of your prospect
5	3. Be specific about
	a. the job you want
	b. your qualifications
	c. your achievements
	4. Back up every statement of ability with evidence
5	B. Develop the presentation
	1. Tailor the portfolio
	2. Put letters to work
	a. shotgun letters
	b. rifle letters
10	
3	III. Prepare for each interview
3	IV. Plan your follow-up letter or call
2	V. Turn liabilities into assets
2	VI. Look to the future

SESSION 42. PRACTICE BRIEFING SESSION

A. Oral research reports (*10 minutes*); practice briefing session

B. *Study assignment:* general review

C. *Work assignment:* write a letter to high school students you know, telling them you are looking forward to seeing them at the career forum

SESSION 43. ORAL CAREER REPORT

A. Oral research reports (*10 minutes*); oral presentation of one career report

SESSION 44. ORAL REPORTS

Oral research reports (*10 minutes*); oral presentation of one career report

SESSION 45. CAREER FORUM

Examination; career forum

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